

# SELF-IMPLEMENTING CLEANUP PLAN INTERNATIONAL BACCALAUREATE SCHOOL EAST BUILDING AND CONNECTORS

Site Location

85 Edwards Street Hartford, CT

Prepared For

**Hartford School Building Committee** 

Hartford, Connecticut

Prepared By

TRC

Windsor, Connecticut

May, 2011



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#### 1.0 INTRODUCTION

TRC has prepared this Self-Implementing Cleanup Plan (SIP) for use by the Hartford Building School Committee (HBSC) in conducting site remediation tasks prior to the performance of site renovation and demolition tasks at the International Baccalaureate School (formerly Thomas J. Quirk Middle School) (Site) located at 85 Edwards Street in Hartford, Connecticut. The Site, which is part of the Hartford School System, is owned by the City of Hartford. The HSBC will have contract oversight for the work contained in this SIP and, therefore, will be responsible for the cleanup. Correspondences of final approvals or actions should be address to:

James A. Keaney Jr.
Director of Capital Projects
City of Hartford
525 Main Street, 4th Floor
Hartford, CT 06103

The goal of Site remediation detailed in this SIP is to achieve compliance with applicable federal regulations as stated in 40 CFR §761.61(a), §761.61(c), §761.62(a), and 761.79(h). An additional goal is to achieve compliance with the applicable state regulations as stated in the Regulations of Connecticut State Agencies (RCSA) Sections 22a-133k-1 through 22a-133k-3 (Remediation Standards Regulations), inclusive, and 22a-463 through 22a-469 (PCB Regulations), inclusive. This SIP only addresses environmental issues related to PCBs and includes an outline of the approach and procedures that Contractors will follow to ensure achievement of the remedial objectives.

Specifically, the remedial goals for the Site to achieve compliance with the federal regulations are as follows:

To remove all PCB-containing caulks and window glazings classified as PCB Bulk
Product Wastes and to remove building materials potentially contaminated
through contact with PCB-containing caulks and window glazings (substrates) and
classified as PCB Remediation Wastes from buildings that are scheduled for
demolition/renovation prior to performance of these activities;

- To remove all soil/surface cover adjacent to the buildings with total PCB concentrations ≥1 mg/kg contaminated by releases from PCB Bulk Product Wastes and classified as PCB Remediation Wastes; and
- To perform sufficient verification sampling following the removal efforts to demonstrate compliance with the applicable federal regulations.

The remedial goals for the Site to achieve compliance with the state regulations are as follows:

- To remove all PCB-containing caulks and window glazings with concentrations greater than 1 mg/kg and to remove building materials potentially contaminated through contact with PCB-containing caulks (substrates), if necessary, from buildings;
- To remove all soil/surface cover adjacent to the buildings with total PCB concentrations >1 mg/kg contaminated by releases from state regulated PCB-containing caulk and window glazing; and
- To perform sufficient verification sampling following the removal efforts to demonstrate compliance with the applicable state regulations.

A remedial approach has been developed for this project to achieve compliance with the remedial goals as stated and is presented herein.

# 1.1 Site Description and Location

The Site consists of the International Baccalaureate School (formerly Thomas J. Quirk Middle School) which is located on an eleven acre site in a residential area at 85 Edwards Street, Hartford, Connecticut, see Figure 1 for a Site aerial view. The facility was utilized as a middle school designated for use by seventh and eighth grade which closed in 2010 and is currently unoccupied. The Site comprises two buildings constructed in 1972 interconnected by tunnels and bridges with a gross building area of approximately 214, 805 square feet (SF). The east building remains empty and the west building is currently being utilized by the Hartford Police Department as a training facility. The building sits on an elevated plateau. The site slopes north of the building toward Albany Avenue with an 18 foot change in grade. Similarly, the site slopes

toward Walnut Street, southwest of the building, with a 14 foot grade change in this direction. A landscaped plaza is located in front of the school with shrubs, flowers and picnic benches. Trees line the eastern border of the parking lot near Edwards Street. There are also trees south of the unmarked paved area, south of the school. The majority of the area immediately surrounding the building is paved with asphalt or concrete with some areas of exposed soil present.

# 1.2 Building Construction and Renovation History

The school was built in 1972, remains intact and apparently unrenovated and consists of two, three story brick and cinder block buildings connected by walkway tunnels and bridges. Interior walls are constructed primarily of sheetrock over concrete blocks and the floors are concrete. Support columns and the building frame are constructed of steel. Four sets of stairs connecting the ground through third levels are constructed of concrete. Windows are of original steel construction. A boiler room is located in the west building on the ground level and the east building has two HVAC mechanical rooms on three floors. The built-up roof consists of asphalt roll-on roofing over gypsum on metal decking and appears to be homogeneous throughout both buildings and the connectors.

#### 1.3 Description of Planned Renovation Activities

This plan was created for the east building and connectors (walkway tunnels and bridges). The renovation project planned for the school will disconnect the buildings above grade and renovate as-new the east building with the west building not included in the scope of the project. A renovation project is planned for the School with work to commence in the fall of 2011. Beginning on April 26, 2011, plans for the renovation project will be submitted to the State of Connecticut School Facilities Unit for their review and eventual approval. For the following years, the building will remain vacant. This will allow work on the school to continue without interruption until completion with no "School in Session." Renovation work will include asbestos abatement, lead abatement, PCB abatement and PCB Remediation Waste (a limited amount of building substrates and soil) removal. Renovation activities will include removal all windows and doors from the entire

east building and complete demolition of all interior walls. In summary, the interior portion of the building will be a total gut/rehab with new areas of construction planned. A radon mitigation system will be installed beneath all new construction. General construction is anticipated to commence in the fall of 2011.

Renovation history for the buildings was not readily available however upon visual inspection it was evident that the east building and connectors remain as-built.

# 2.0 SAMPLING PROGRAM DESCRIPTION

Initial building surveys and sampling were performed in January – March, 2011 to categorize interior and exterior caulks and glazings at the Site. Subsequent to this sampling, additional investigations were performed to determine PCB concentrations within building materials adjacent to areas with PCB Bulk Product Wastes/State Regulated Materials and to characterize the extent of impacts to soil or other surface cover materials that may have been affected by flaking or deteriorating PCB wastes. In addition to this sampling, additional building survey and sampling work was performed to ensure that all caulks and glazings at the site were characterized and that their locations were known with a high level of accuracy. Analytical data reports for all sampling, initial building survey and follow-up sampling programs are included in Appendix A.

All of the caulk and glazing analytical results are presented in Table 1 and the sampling data for building materials adjacent to caulks and glazings are presented in Table 2. Figure 2-3E shows the locations for bulk material and building substrate samples. Sampling data for surface cover materials which include mostly asphalt and concrete with limited areas of soil are presented in Table 3. Figure 4 shows the sampling locations for surface cover materials.

# 2.1 <u>Bulk Product Building Material Sampling and Results</u>

On January 26, 2011 and March 15, 2011, TRC surveyed the building (East Building and Connectors) and collected caulk and glazing samples. Sampling methodology involved collecting a single grab sample per homogenous material type identified by completely removing the caulk and the glazing from the location and inspecting to determine if there were any other materials present at the location. All of the caulks and glazings were determined to be original to construction or were placed into a location where all previously applied caulks and glazings had been removed.

Building surveys were performed following techniques generally employed in the Building Sciences industry to identify, locate and sample homogeneous building materials (i.e. Asbestos Hazard Emergency Response Act [AHERA] asbestos sampling guidelines). All major construction was performed prior to the federal ban on PCB use and no portions of the buildings were excluded

in the scope of the survey. The Environmental Protection Agency (EPA) Methods 8082/3540C (PCB analysis with soxhlet extraction) was used for analysis at a State of Connecticut approved laboratory.

Based on the laboratory analytical results for the suspect PCB samples, Building materials were grouped into one of three categories as described in the sections which follow. Sample descriptions and an analytical results summary are presented in Table 1.

# 2.1.1 PCB Bulk Product Waste

All caulk and glazing samples with total PCB concentrations ≥50 mg/kg were included in this category and only three exterior caulk samples met the PCB Bulk Product Waste criteria.

- The exterior expansion joint caulk (EJC) was found between joints in the exterior brick façade, along the vertical sides of the windows and along the horizontal length of the mechanical room intake vents. Total PCB concentrations in this caulk were determined to be 100,000 mg/kg.
- The exterior window sill cap caulk (EWS) was found below the metal window sill
  cap where it meets the brick façade on the second and third floors and where it meets
  concrete on the first floor. Total PCB concentrations in this caulk were determined
  to be 56,000mg/kg.
- The exterior door caulk (EDC) was found along the metal door frames where it
  meets the brick façade. Total PCB concentrations in this caulk were determined to
  be 46,000 mg/kg.

# 2.1.2 Excluded PCB Products/State Regulated PCB Products

Building caulks and glazing were determined to be Federally Excluded PCB Products/State Regulated PCB Products if the in-situ total PCB concentrations was >1 mg/kg and <50 mg/kg and if it could be determined that the caulk was original and that the total PCB concentration had not been modified by subsequent activities. Of the fourteen (14) building caulks/glazes sampled, ten (10) were determined to be Excluded PCB Products/State Regulated PCB Products.

• The exterior hard light grey window glazing (EWG1) was identified throughout all

- the exterior windows. Total PCB concentrations in this caulk were determined to be 35 mg/kg.
- The exterior hard grey door window glazing (EDWG1) was identified throughout the exterior door windows. Total PCB concentrations in this caulk were determined to be 2.1 mg/kg.
- The exterior flexible brown door window glazing (EDWG3) was identified on two
  out of twenty-eight exterior door windows. Total PCB concentrations in this caulk
  were determined to be 13 mg/kg.
- The exterior window caulk (EWC) was identified throughout all the exterior windows. Total PCB concentrations in this caulk were determined to be 17 mg/kg.
- The interior counter backsplash caulk (C1) was identified on Formica countertops where the counter and backsplash meet in Rooms 103, 105, 110, 113, 115, 116, 118, 211 A, 211B, 308, 311A, 311B, 325. Total PCB concentrations in this caulk were determined to be 2.2 mg/kg.
- The interior window glazing (WG1) was identified throughout all the exterior windows. Total PCB concentrations in this caulk were determined to be 29 mg/kg.
- The interior window glazing (WG2) was identified throughout the interior windows in Rooms 102, 106, 112, 113, 209, 210, 223, 224, 309, 310, 323, 324, 2<sup>nd</sup> & 3<sup>rd</sup> Floor Administrative Suites. Total PCB concentrations in this caulk were determined to be 1.1 mg/kg.
- A light gray caulk was identified on the roof skylight. Total PCB concentrations in this caulk were determined to be 4.03 mg/kg.
- A dark gray caulk was identified on the roof skylight. Total PCB concentrations in this caulk were determined to be 1.1 mg/kg.
- A red caulk was identified on the roof skylight. Total PCB concentrations in this
  caulk were determined to be 1.03 mg/kg.

# 2.1.3 <u>Excluded PCB Products/Non-State Regulated PCB Products</u>

Building caulks and glazing were determined to be Federally Excluded PCB Products/Non-State Regulated PCB Products if the in-situ total PCB concentration was <1 mg/kg and if it could be determined that the caulk was original and that the total PCB concentration had not been modified by subsequent activities. Of the fourteen (14) building materials sampled, one (1) was determined to be Excluded PCB Product/Non-State Regulated PCB Product. The exterior sticky black door window glazing (EDWG2) was identified on seven out of twenty-eight exterior door windows and will not be discussed further.

# 2.2 <u>Building Material Substrate Sampling and Results</u>

Building material substrate samples were collected in a manner that would allow for determination of the effectiveness of the proposed removal activities and potential characterization of the substrates as PCB Remediation Wastes according to 90 CFR 761 Subpart N modified to meet the needs of this sampling program. Proposed removal activities include the complete removal of PCB Bulk Product Wastes and a portion of the adjacent building substrates (PCB Remediation Waste) sufficient to meet the remedial objective PCB concentration of <1.0 mg/kg. No substrate sampling was conducted in areas where glazing/caulking meets glass (non-porous) and unpainted metal or where caulk meets non-porous Formica countertops as planned renovation activities call for complete removal of the windows, doors and counters. In these cases, the entire window/door, frames and countertops will be removed and disposed of based on the PCB concentrations detected in the caulks and glazings.

Initial representative samples of building material substrates were collected on March 1, 2011, at a distance of twelve and six inches from the subject caulked seams. On March 18, 2011 further representative samples of building material substrates were collected at distance of three and zero inches from the subject caulked seams. This was accomplished by measuring the distance from the caulked seam and then marking a line parallel to the caulked seam on the building materials to be sampled. Samples were collected following the EPA Region 1 Standard Operating Procedure for Sampling Concrete at each of the location to a depth of ½". Samples

were extracted and analyzed using EPA Methods 3540C and 8082, respectively, and all analytical results were reported on a dry weight basis.

Based on the laboratory analytical results for the potential PCB Remediation Waste (Building Substrates) samples, building materials were grouped into one of two categories as described in the sections which follow.

#### 2.2.1 PCB Remediation Waste

Building material substrates in contact with PCB Bulk Product Wastes and/or State Regulated caulks/glazes with total PCB concentrations ≥1 mg/kg are considered to be PCB Remediation Wastes. No evidence of re-caulking was found at any of the sample locations. On March 1, 2011, six sets of samples were collected at distances of twelve inches and six inches from the caulk line in one location for each type of PCB Bulk Product (≥ 50 ppm) and associated porous substrate. All twelve (12) samples collected at these distances were less than 1 mg/kg total PCBs. Therefore, on March 18, 2011, thirteen (13) additional sets of samples were collected at distances of three inches and zero inches (point of contact) from the caulk line in four locations for each type of PCB Bulk Product and associated porous substrate. All thirteen samples collected at the three inch distance were less than 1 mg/kg total PCBs. However, twelve of thirteen samples taken at the zero inch distance were >1 mg/kg total PCBs indicating the brick and concrete directly next to Exterior Expansion Joint Caulk, Exterior Door Caulk and Exterior Window Sill Cap Caulk out to a distance of three inches is considered PCB Remediation Waste. Analytical results for building substrate samples are summarized in Table 2 and building substrate sample locations are shown on Figures 2-3E.

# 2.2.2 <u>Unregulated Materials</u>

Building material substrates in contact with either PCB Bulk Product Wastes or State Regulated Materials with concentrations <1.0 mg/kg are considered unregulated materials. Of the thirteen representative building substrate samples collected at a distance of three inches and six samples collected at distances of six inches and twelve inches, all exhibited concentrations of PCB <1.0 mg/kg. Thus materials substrates beyond three inches from the caulks are considered non-

regulated.

No State Regulated Materials were located in contact with porous materials; therefore no substrates were sampled adjacent to these materials. State Regulated Materials were located in areas where glazing meets no-porous glass and unpainted non-porous metal or where caulk meets non-porous Formica countertops. In these cases, the entire window/door, frames and countertops will be removed and disposed of based on the PCB concentrations detected in the caulks/glazings.

# 2.3 Exterior Surface Cover Sampling and Results

Sampling of exterior surface cover materials directly beneath horizontal and vertical applications of PCB Bulk Product Wastes and/or State Regulated caulks/glazes was performed on March 15 and March 18, 2011, according to 40 CFR Part 761 Subpart N modified to meet the needs of this sampling program. Specifically, surface cover samples were collected a distance of 1 foot from the base of the building at ten foot intervals (for horizontal applications) and beneath vertical applications.

All soil samples were collected as grab samples of a soil interval not to exceed three inches in depth. All asphalt and concrete samples were collected following the EPA Region 1 SOP for sampling porous materials to a depth of ½". No compositing of grab samples was performed and grab samples were extracted and analyzed using EPA Methods 3540C and 8082, respectively, and all analytical results were reported on a dry weight basis.

The following provides details concerning the delineation of PCB-impacted surface covers at each of the areas where remediation will be required. Surface cover remediation excavation and verification sampling procedures are discussed further below.

# 2.3.1 PCB Remediation Wastes

Of the one hundred and three (103) grab samples collected, eight consisted of soil samples, thirty consisted of asphalt samples and sixty-five consisted of concrete samples.

Of the eight surface soil samples collected, two samples were classified as PCB Remediation Wastes, with the total PCB concentrations ≥ 1.0 mg/kg and <50 mg/kg. Of the thirty grab samples for asphalt collected, six samples were classified as PCB Remediation

Wastes, with the total PCB concentrations  $\geq 1.0$  mg/kg and <50 mg/kg. Of the sixty-five grab samples for concrete collected, five samples were classified as PCB Remediation Wastes, with the total PCB concentrations  $\geq 1.0$  mg/kg and <50 mg/kg. Analytical results for surface cover materials are summarized in Table 3. Surface cover sample locations are shown on Figure 4.

# 3.0 <u>REMEDIATION PROCEDURES</u>

The goal of building material remediation efforts is to ensure that all PCB Bulk Product Wastes and the associated building materials classified as PCB Remediation Wastes as well as state-regulated materials are removed from areas prior to building demolition or renovation activities. PCB Bulk Product Wastes/State Regulated Materials (caulk and glazing), and building materials classified as PCB Remediation Wastes will be removed utilizing abatement work practices and engineering controls to limit the potential release of PCB dust/debris. The work will be performed by a specialty contractor utilizing workers afforded appropriate hazard communication training and under the supervision of an appropriately educated and trained third party (field inspector) who can validate appropriate removal techniques and confirm thorough removal of identified materials. All materials will be containerized and then transported offsite for appropriate disposal.

Exact means and methods for all building material removal actions cannot be specified as sufficient construction drawings are not available for the structures to be demolished or renovated. The guidelines provided below present the general procedures that are to be followed for the removal of building materials but the contractor will have to determine exact removal actions during the performance of the work.

No segregation of PCB wastes will be performed during building material abatement work and the caulks and glazings will be removed together with the affected building substrates at each location. For this particular project, the remedial standard for all verification samples will be total PCB concentrations <1 mg/kg. Achieving this remedial standard at all verification sampling locations will allow for the remaining building materials to be demolished as "clean" or to remain in place and to be repaired during subsequent renovation activities.

Soil and surface cover remediation will also be performed during the project. Soil/Surface Cover remediation procedures and subsequent verification sampling are discussed in more detail below.

# 3.1 Safety and Monitoring Requirements

The demolition and renovation project will be performed as described above and it is anticipated that workers and students will not use school buildings while removal and abatement is ongoing. However, to prevent exposure of onsite workers to potentially PCB-contaminated dust, Control Areas will be established outside of the Regulated/Containment/Soil/Surface Cover Excavation Areas. Only properly trained personnel associated with the removal, abatement, and soil/surface cover excavation actions will be allowed within the Control Areas that will be established by placing barriers with signs indicating that access to the area is restricted. The field inspector will maintain the Control Areas and escort unauthorized personnel from the area promptly. Only those personnel actively working on the removal, abatement, and soil/surface cover excavation actions will be allowed within the Regulated/Containment Area and they shall be equipped with Personal Protective Equipment (PPE).

For PCB-contaminated material removals, dust monitoring will be performed in the Control Area immediately outside the Regulated/Containment Area prior to initiating the removal action, during performance of the action, and following the removal which will include the break-down of the Regulated/Containment Area. For PCB-contaminated material removals monitoring will be performed for total suspended particulates (TSP)(dust). The background concentration within each interior Control Area will be determined prior to initiating remedial actions and a control area background level will be established. If, during the performance of air monitoring during removals, dust levels outside the Regulated/Containment Area are observed to increase by 20-percent over the background level determined prior to the remediation, the contractor shall be instructed to stop work and to inspect and reestablish, as necessary, the Regulated/Containment Area and associated engineering controls. The Contactor shall then be required to decontaminate the Control Area outside Regulated/Containment Area if it is found that the containment or engineering controls failed or were not functioning properly.

For soil/surface cover excavation activities, the remedial contractor will be required to employ dust suppression measures, most likely watering, to prevent dust generation. It is not anticipated that OSHA limits for dust or PCB exposures will be approached. The dust

suppression will be employed to prevent the potential release of PCBs to the surrounding environment and the contractor will be directed to employ dust suppression measures if any dust generation is observed.

# 3.2 Public Communication

Public outreach will be performed both prior to initiating and during the project to inform the community of the activities that will be performed at the Site to address PCB contamination. Prior to mobilizing to the site a letter will be sent out to parents and faculty members describing the remediation program that will be part of the renovation program at the site. A draft of this letter is included in Appendix B. Additional information will be provided to the community during the performance of the project as needed or requested by the affected community.

# 3.3 Engineering Control Descriptions

Engineering controls to be implemented for exterior remediation will follow along similar guidelines as used when conducting asbestos abatement activities. Engineering controls will be modeled after OSHA Class I asbestos engineering controls for interior remediation work, and modeled after exterior OSHA Class II asbestos engineering controls for exterior remediation work. A description of these activities is as follows. More detailed descriptions will be provided in specifications for the work which shall serve as the Contractor's Workplan for the work.

# 3.3.1 Interior Remediation Procedures

Interior Remediation Procedures are as follows:

- It is assumed that, since the buildings will be vacated prior to demolition activities,
  that all moveable equipment will have been removed prior to the performance of any
  abatement activities and that the work space shall be free and clear of any
  obstructions and no materials requiring additional protection will be present
- Any openings between the Remediation Area and the non-remediation areas,
   including the outside of the building, shall be sealed off with critical barriers

- consisting of a minimum of one (1) layer of six (6) mil polyethylene sheeting securing the edges with tape.
- A Negative Pressure Enclosure (NPE) shall be constructed around the work area by covering of floor and wall surfaces with 2 layers of 6 mil polyethylene sheeting sealed with tape. Polyethylene shall be applied alternately to floors and walls.
- The Contractor shall create a negative pressure differential in the range of 0.02 to 0.04 inches of water column between the Remediation Area and surrounding areas by the use of acceptable HEPA-filtered negative air pressure equipment. No air movement system or air filtering equipment shall discharge unfiltered air outside the Remediation Area. The contractor shall continually monitor the pressure differential to ensure that the NPE is functioning appropriately and will stop work if the pressure differential is outside acceptable limits. Work will recommence after an acceptable pressure differential has been established.
- The contractor will maintain the NPE throughout the entire removal action and dust levels will be monitored outside the area as described above. Corrective actions as described will also be performed if monitoring indicated that is required.
- Signs shall be posted outside the enclosure to deter unauthorized personnel from entering.
- Removal work practices within the regulated containment shall be implemented
  which facilitate the removal of the PCB Bulk Product Waste/State Regulated Material
  and associated building material while also limiting the amount of dust and debris to
  be generated. Acceptable removal equipment will include pneumatic hammers or
  other similar equipment. The contractor will remove the designated amount of
  building material substrate around the PCB Bulk Product Waste/State Regulated
  Waste.
- All building materials removed during the remediation will be wrapped in poly sheeting and transported to the waste storage area. The poly sheeting will be secured

with tape to ensure that no dust is released during the transport and the contractor will be responsible for the remediation of any new releases caused by spillage.

 Verification sampling will be performed as described below to determine that all building materials classified as PCB Remediation waste have been removed.

# 3.3.2 <u>Exterior Remediation Procedures</u>

Exterior remediation procedures are as follows:

- During removal of PCB Bulk Product Wastes and associated building material, ground surfaces in the regulated area will be covered with 2 layers of 6 mil polyethylene sheeting to capture/collect any debris generated, and secured to prevent movement. The sheeting will extend a minimum of ten feet beyond the building area to be remediated.
- Any building openings such as windows, doors, vents, etc in the immediate vicinity of
  the exterior remediation areas will be sealed off with critical barriers consisting of a
  minimum of one (1) layer of six (6) mil polyethylene sheeting securing the edges with
  tape.
- An enclosure will be constructed around the work area by covering ground and wall surfaces with 2 layers of 6 mil polyethylene sheeting sealed with tape. Polyethylene will be applied alternately to floors and walls. If needed, a moveable enclosure may also be constructed around a platform on a boom lift or other similar device.
- The Contractor will maintain the enclosure throughout the entire removal action and dust levels will be monitored outside the area as described above. Corrective actions as described will also be performed if monitoring indicates that it is required.
- Signs will be posted outside the enclosure to deter unauthorized personnel from entering.
- Removal work practices within the regulated containment will be implemented which facilitate the removal of the PCB Bulk Product Waste/State Regulated Material and associated building material while also limiting the amount of dust and debris to be generated. Acceptable removal equipment will include pneumatic hammers or other similar equipment. If the Contractor chooses to use grinding or cutting tools without

local HEPA cowled ventilation during the removal they shall be required to establish a Negative Pressure Enclosure. The contractor will remove the designated amount of building material substrate around the PCB Bulk Product Waste/State Regulated Waste.

- All building materials removed during the remediation will be wrapped in poly sheeting
  and transported to the waste storage area. The poly sheeting will be secured with tape to
  ensure that no dust is released during the transport and the contractor will be responsible
  for the remediation of any new releases caused by spillage.
- Verification sampling will be performed as described below to determine that all building materials classified as PCB Remediation Wastes been removed.

# 3.3.3 Phased Remediation

In instances where PCB Bulk Product and building material cannot be removed prior to performing "clean" demolition the following procedures will be followed, except in the case of soil remediation:

- Verification sampling, at the frequency required shall be performed prior to the removal of clean materials.
- The Contractor will be required to physically delineate PCB Bulk Product Wastes and building material areas, as determined by the verification sampling, on the building with paint or other suitable materials.
- Prior to initiating "clean" demolition activities, the Contractor will seal the caulks
  classified as PCB Bulk Product Waste and their associated building material as
  designated in the SIP so as to not create additional releases by disturbing the caulk
  during the demolition. This seal will consist of tape or taped/glued poly sheeting and
  the contractor will be required to maintain this seal until these materials are ready to be
  removed.
- "Clean" demolition activities will be performed to the extent of the delineation performed prior to initiating activities and then the contractor will be required to employ exterior remediation procedures as described above to remove the regulated PCB

wastes.

 Once the regulated PCB wastes have been removed to the extent indicated as being required by the delineation, the contractor will return to employing "clean" methods for demolition.

# 3.4 Reoccupancy Testing

For interior and exterior containments, the entire area within containment will be HEPA vacuumed to remove dust. The project monitor will then inspect the area to determine that is has been cleaned of all dust generated during the abatement for interior containments, one or two interior wipe samples will be collected from horizontal areas where dust would be expected to accumulate within each containment. For exterior containments, one or two wipe samples will be collected from horizontal building materials that were within the containment to further determine that all potentially contaminated dust has been removed.

For areas that are being renovated, where wipe samples are representative of materials to remain in place, all wipe samples will be required to be  $<1.0~\mu g/100~cm^2$ . For areas that are being demolished, where wipe samples are representative of materials to be removed and disposed, all wipe samples will be required to be  $<1.0~\mu g/100~cm^2$ . The actual number of wipe samples performed in the field will depend upon the number of containments established by the Contractor for the abatement actions.

If any of the containment areas fail any of the cleanliness verification procedures, inspection or wipe samples, the Contractor shall be instructed to reclean the area and all inspections and testing will be performed until the area has been cleared for reoccupancy.

# 3.5 <u>Verification Sampling for Building Materials</u>

Approval of verification sampling for building material removals on a frequency less than that specified in Subpart O is requested for this remediation project. Based on the existing sample data and this SIP for the project, the proposed verification sampling frequency is one sample per every 50 linear feet. All verification samples from porous materials will be collected

from ½" depths following the EPA Region 1 Standard Operating Procedure which is included in Appendix C. Table 4 lists the areas where building material samples will be collected and the estimated number of verification samples to be collected.

Additional details as to sampling protocols are as follows:

- The removal action will include removal of the HVAC intake vents, metal window sill
  caps and window/door frames intact by cutting or otherwise breaking the supports that
  fasten them to the building. Following the removal of the HVAC intake vents, metal
  window sill caps and window/door frames, three inches of brick/mortar and/or concrete
  will be removed as well.
- At locations where PCB Bulk Product Wastes are bordered on either side by porous materials (e.g. concrete, brick) both sides of the removal action will be treated in the calculation of linear feet for verification sampling. If at all possible, verification samples on either side of the caulked joint will be staggered so as to "spread" the location of the verification samples.
- The removal action will include all porous building materials adjacent to the caulked joint. Thus if porous materials are found behind the PCB Bulk Product Waste (caulk) they will also be removed to a depth of 3 inches and the space behind will also be included separately in the calculation of linear feet for verification sampling.
- "Backing" material may be present behind the building caulks. Any backing material
  adjacent to the PCB containing caulk and in contact/coated with a porous surface will be
  removed and disposed with the caulk.
- In the cases where air spaces exist behind PCB Bulk Product Waste (caulk), no building materials will be removed beyond the limit of the air space.

The oversight contractor will collect verification samples at the approved frequency and will be responsible for verifying that sufficient samples have been collected and that the remedial goal has been achieved prior to initiation of "clean" demolition activities. Clean demolition activities will commence after the oversight contractor has determined that remedial requirements have been achieved. In the case where verification samples do not achieve the

remedial goal, the oversight contractor will instruct the remedial contractor to reestablish the appropriate controls and regulated area and to continue the removal of building materials using the removal procedures as stated above.

# 3.6 Soil/Surface Cover Remediation

Each of the designated soil/surface cover remediation areas is easy to access and there will be no restrictions on the type of equipment employed. An excavator or other similar type of equipment will be used to remove soil/surface cover which will be live loaded into lined rolloff containers or dump trailers for transport to the appropriate disposal facility. Verification samples for soil will be collected as per Subpart O. Following excavation and analyzed in the same manner as previously collected characterization sampling. However, as many as five sample locations may be composited prior to analysis. Any composite samples generated will be from contiguous sample locations on the 1.5 m by 1.5m Subpart O sampling grid. Soil/surface cover samples collected from the base and sidewalls of the excavations will consist of surficial soil, asphalt and concrete. Where contaminated soil/surface cover is in contact with concrete or asphalt to remain, samples of these materials will be collected following the EPA Region 1 SOP for sampling concrete to a depth of ½°. Composite samples will be submitted for analysis. Composite samples will consist of equal mass aliquots from contiguous sample locations of the same matrix (e.g., soil samples will only be composited with other soil samples).

All sample compositing activities will be logged such that the date of compositing and the grab samples in the composite is recorded in a permanent manner. All grab samples will be maintained for potential submittal to the analytical laboratory if required.

Soil excavations will be backfilled with certified clean soil meeting the CTDEP Remediation Standards Regulations (RSRs) for the Residential Direct Exposure Criteria (RDEC) and Groundwater Classification A (GA) Pollutant Mobility Criteria (PMC).

# 3.7 Waste Characterization, Transport, and Disposal

Wastes will be precharacterized to the satisfaction of the selected disposal facility prior to

initiating any remedial activities. All wastes generated during building remediation activities will be shipped for disposal as PCB Bulk Product Waste at a TSCA-permitted facility and no attempt will be made to segregate the removed material.

All wastes generated during soil remediation activities will be shipped for disposal as PCB Remediation Wastes at a concentration less than 50 mg/kg at a facility permitted to receive such waste.

# 3.8 Equipment Decontamination

All moveable equipment, tools, and sampling equipment which has contacted the PCB Bulk Product or Remediation Wastes will be decontaminated prior to leaving the site. Decontamination procedures will comply with either §761.79(b)(3)(i)(A), §761.79(b)(3)(ii)(A) or §761.79(c)(2).

All decontamination wastes, PPE, and polyethylene that come in contact with PCB Bulk Product or Remediation Wastes will be disposed of as PCB Wastes with concentrations greater than 50 mg/kg. These wastes will be segregated as to matrix, aqueous, non-aqueous liquids, or solid materials (e.g., PPE), and stored in drums or lined containers prior to transport from the site for disposal.

Aqueous and non-aqueous liquids will be tested for PCB content and shipped offsite for disposal at permitted facility to receive such wastes. Solid Wastes will be containerized with the other regulated PCB wastes generated during the remediation project for transport and disposal.

# 3.9 Notification and Certification

The removal and abatement measures described within this SIP will be initiated after receiving written approval of the plan from EPA. Notification of intent to perform these remedial measures is provided to EPA with this submittal and will also be provided to the CTDEP, HSBC and local officials.

Also enclosed with this submittal in Appendix D, in accordance with EPA 40 CFR 761.61(a)(3), is a written certification from the HSBC indicating the location of all reports detailing sample collection and analysis procedures used to assess or characterize the PCB contamination for

this SIP are available for EPA inspection.

# 4.0 **DOCUMENTATION**

Documentation of the field activities will be performed on a daily basis by the contractor and remediation monitor during the performance of the remediation and will be summarized at the conclusion of the remediation in a Remedial Action Report (RAR).

# 4.1 Field Notes

The field inspector will maintain a daily log of on-site activities. That log will include, but not be limited to the following:

- Daily health and safety meetings
- Personnel and equipment on site
- Field procedures and observations
- Remediation progress and extents
- Sample locations, selection criteria, samples collected, analyses performed, sample handling
- Telephone or other instructions
- Equipment decontamination
- Building structure substrate /soil verification testing
- Waste transporter information

# 4.2 Photographs

Photographs will be taken of representative activities, such as remediation, sample locations, and soil excavation. The final extents of the remediation/excavations will also be photographed. Copies of selected photographs will be included in the RAR.

# 4.3 Survey

The horizontal extents of the soil excavations will be documented by reference to existing fixed site features such as buildings or fence lines. Vertical extents will be measured from the surrounding ground surface. The RAR will include documentation of the extent and depth of the soil excavation.

# 4.4 <u>Transport and Treatment/Disposal Certifications</u>

Manifests and/or Bills of Lading for the transportation, treatment and disposal of waste materials and certifications of the treatment or disposal of the wastes, if necessary, will be obtained from the transporter and from the treatment/disposal facility. Copies of these forms will be included in the RAR.

# 4.5 Report

The RAR will be prepared upon receipt of all analytical data confirming that the removal action was complete and receipt of certifications of treatment/disposal from the treatment/disposal facility. The RAR will include the following.

- Site description
- A description of field procedures
- Verification sample locations and analytical results
- A photographic record of the remediation, excavations and backfilling
- Figures showing the extent of excavations and restoration
- Waste characterization sample data
- Waste transport and treatment disposal information
- · Copies of waste manifests and bills of lading

# 4.6 Recordkeeping

All records and documents required by 40 CFR Part 761, including all those records required under Subpart K, will be prepared for and maintained by the HSBC. The records shall be maintained in a centralized location for a minimum of three years and will be available for inspection by representatives of EPA if required.

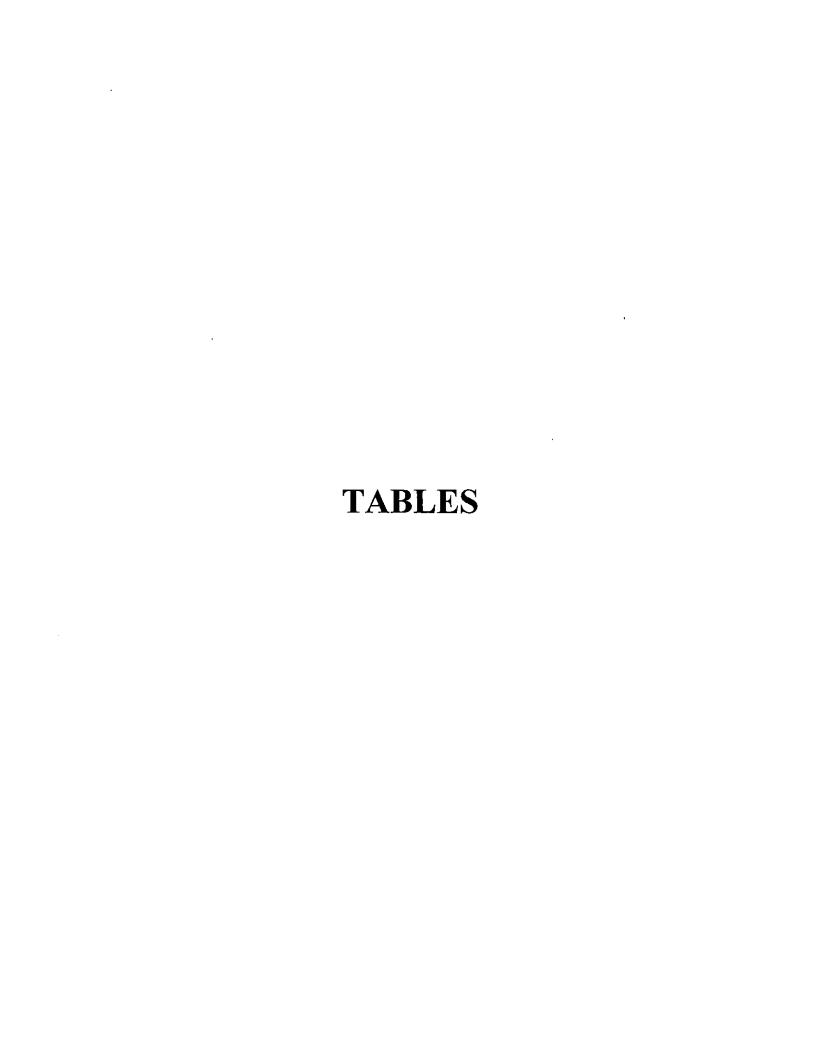


			Table 1		
	ш	<b>3ulk Material Sa</b>	Bulk Material Sample Analytical Results	ılts	·
		International E	International Baccalaureate School		
		На	Hartford, CT		
Bulk Material ID	Date Sampled	Date Analyzed	Total PCBs (mg/kg)	Material Classification	Aroclor Identified
Exterior Door Window Glazing Type 2	1/26/2011	2/8/2011	6.0	Excluded PCB Product	1254
Exterior Window Glazing	1/26/2011	2/8/2011	35	Excluded PCB Product/State Regulated	1248 &1254
Exterior Door Window Glazing Type 1	1/26/2011	2/8/2011	2.1	Excluded PCB Product/State Regulated	1254
Exteiror Door Window Glazing Type 3	1/26/2011	2/8/2011	13	Excluded PCB Product/State Regulated	1254
Exterior Window Caulk	1/26/2011	2/8/2011	17	Excluded PCB Product/State Regulated	1254
Interior Caulk Type 1(C1 - on Countertops)	1/26/2011	2/8/2011	2.2	Excluded PCB Product/State Regulated	1254
Interior Window Glazing Type 2	1/26/2011	2/8/2011	1.1	Excluded PCB Product/State Regulated	1254
Interior Window Glazing Type 1	1/26/2011	2/8/2011	29	Excluded PCB Product/State Regulated	1254
Light gray caulk	3/15/2011	3/24/2011	4.03	Excluded PCB Product/State Regulated	1254
Dark gray caulk	3/15/2011	3/24/2011	1.1	Excluded PCB Product/State Regulated	1254
Red caulk	3/15/2011	3/24/2011	1.03	Excluded PCB Product/State Regulated	1254
Exterior Expansion Joint Caulk	1/26/2011	2/8/2011	100,000	PCB Bulk Product Waste	1254
Exterior Window Sill Cap Caulk	1/26/2011	2/8/2011	56,000	PCB Bulk Product Waste	1254
Exterior Door Caulk	2/17/2011	2/23/2011	46,000	PCB Bulk Product Waste	1254

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			Table 2				
	_	3uilding Subst	Building Substrate Sample Analytical Results	alytical Resu	ılts		
		Internatio	International Baccalaureate School	te School			
		•	Hartford, CT				
Sample ID	PCB Building Material	Substrate Description	Distance From Caulk (inches)	Date Sampled	Date Analyzed	Total PCBs	Material Classification
18-B0	Exterior Door Caulk	Brick	Zero inches	3/18/2011	3/24/2011	8.3	PCB Remediation Waste
22-B0	Exterior Door Caulk	Brick	Zero inches	3/18/2011	3/24/2011	1.91	PCB Remediation Waste
32-B0	Exterior Door Caulk	Brick	Zero inches	3/18/2011	3/24/2011	1.9	PCB Remediation Waste
36-80	Exterior Door Caulk	Brick	Zero inches	3/18/2011	3/24/2011	2.18	PCB Remediation Waste
17-83	Exterior Door Caulk	Brick	Three inches	3/18/2011	3/24/2011	0.072	Unregulated
21-B3	Exterior Door Caulk	Brick	Three inches	3/18/2011	3/24/2011	0.422	Unregulated
31-B3	Exterior Door Caulk	Brick	Three inches	3/18/2011	3/24/2011	0.262	Unregulated
35-B3	Exterior Door Caulk	Brick	Three inches	3/18/2011	3/24/2011	0.0847	Unregulated
10DC	Exterior Door Caulk	Brick	Six inches	3/1/2011	3/9/2011	BRL<0.062	Unregulated

BRL= Below Reportable Limit Note: 0" samples collected at the point of contact between Porous substrate material and regulated building material (caulk).

			Table 2				
	ш	uilding Subst	Building Substrate Sample Analytical Results	alytical Resu	ılts		
		Internatio	International Baccalaureate School	te School			
			Hartford, CT				
Sample ID	PCB Building Material	Substrate Description	Distance From Caulk (inches)	Date Sampled	Date Analyzed	Total PCBs	Material Classification
4DC	Exterior Door Caulk	Brick	Six inches	3/1/2011	3/9/2011	BRL<0.059	Unregulated
3DC	Exterior Door Caulk	Brick	Twelve inches	3/1/2011	3/9/2011	BRL<0.067	Unregulated
9DC	Exterior Door Caulk	Brick	Twelve inches	3/1/2011	3/9/2011	090'0>7YB	Unregulated
14-B0	Exterior Expansion Joint Caulk	Brick	Zero inches	3/18/2011	3/24/2011	40.3	PCB Remediation Waste
24-80	Exterior Expansion Joint Caulk	Brick	Zero inches	3/18/2011	3/24/2011	128	PCB Remediation Waste
26-B0	Exterior Expansion Joint Caulk	Brick	Zero inches	3/18/2011	3/24/2011	27.8	PCB Remediation Waste
30-B0	Exterior Expansion Joint Caulk	Brick	Zero inches	3/18/2011	3/24/2011	2.81	PCB Remediation Waste
13-B3	Exterior Expansion Joint Caulk	Brick	Three inches	3/18/2011	3/24/2011	0.661	Unregulated
23-B3	Exterior Expansion Joint Caulk	Brick	Three inches	3/18/2011	3/24/2011	0.315	Unregulated

Note: 0" samples collected at the point of contact between Porous substrate material and regulated building material (caulk). BRL= Below Reportable Limit

			Table 2				
	ш	Building Subst	ding Substrate Sample Analytical Results	alytical Resu	ılts		
		Internatio	International Baccalaureate School	te School			
			Hartford, CT				
Sample ID	PCB Building Material	Substrate Description	Distance From Caulk (inches)	Date Sampled	Date Analyzed	Total PCBs	Material Classification
25-B3	Exterior Expansion Joint Caulk	Brick	Three inches	3/18/2011	3/24/2011	0.409	Unregulated
29-B3	Exterior Expansion Joint Caulk	Brick	Three inches	3/18/2011	3/24/2011	0.291	Unregulated
2EJC	Exterior Expansion Joint Caulk	Brick	Six inches	3/1/2011	3/9/2011	BRL<0.064	Unregulated
8EJC	Exterior Expansion Joint Caulk	Brick	Six inches	3/1/2011	3/9/2011	BRL<0.059	Unregulated
1EJC	Exterior Expansion Joint Caulk	Brick	Twelve inches	3/1/2011	3/9/2011	BRL <0.067	Unregulated
7EJC	Exterior Expansion Joint Caulk	Brick	Twelve inches	3/1/2011	3/9/2011	BRL<0.056	Unregulated
38-C0	Exterior Window Sill Cap Caulk	Concrete	Zero inches	3/18/2011	3/24/2011	8.77	PCB Remediation Waste
37-C3	Exterior Window Sill Cap Caulk	Concrete	Three inches	3/18/2011	3/24/2011	0.305	Unregulated
6EPC	Exterior Window Sill Cap Caulk	Concrete	Six inches	3/1/2011	3/9/2011	0.293	Unregulated

BRL= Below Reportable Limit Note: 0" samples collected at the point of contact between Porous substrate material and regulated building material (caulk).

			Table 2				
	ш	uilding Subst	Building Substrate Sample Analytical Results	ılytical Resu	ılts		
		Internatio	International Baccalaureate School	te School			
			Hartford, CT	× <sub>e</sub>			
Sample ID	PCB Building Material	Substrate Description	Distance From Caulk (inches)	Date Sampled	Date Analyzed	Total PCBs	Material Classification
5EPC	Exterior Window Sill Cap Caulk	Concrete	Twelve inches	3/1/2011	3/9/2011	BRL<0.065	Unregulated
15-B0	Exterior Window Sill Cap Caulk	Brick	Zero inches	3/18/2011	3/24/2011	10.3	PCB Remediation Waste
20-B0	Exterior Window Sill Cap Caulk	Brick	Zero inches	3/18/2011	3/24/2011	0.583	Unregulated
28-B0	Exterior Window Sill Cap Caulk	Brick	Zero inches	3/18/2011	3/24/2011	1.47	PCB Remediation Waste
34-B0	Exterior Window Sill Cap Caulk	Brick	Zero inches	3/18/2011	3/24/2011	1.34	PCB Remediation Waste
16-B3	Exterior Window Sill Cap Caulk	Brick	Three inches	3/18/2011	3/24/2011	0.08	Unregulated
19-B3	Exterior Window Sill Cap Caulk	Brick	Three inches	3/18/2011	3/24/2011	BRL<0.059	Unregulated
27-B3	Exterior Window Sill Cap Caulk	Brick	Three inches	3/18/2011	3/24/2011	0.065	Unregulated
33-B3	Exterior Window Sill Cap Caulk	Brick	Three inches	3/18/2011	3/24/2011	BRL<0.053	Unregulated

Note: 0" samples collected at the point of contact between Porous substrate material and regulated building material (caulk). BRL= Below Reportable Limit

Sample ID	PCB Building Material	Building Subst Internation Substrate Description	ding Substrate Sample Analytical Results International Baccalaureate School Hartford, CT Substrate Distance From Date escription Caulk (inches)	alytical Resute School Date Sampled	ults Date Analyzed	Total PCBs	Material Classification
12EPC	Exterior Window Sill Cap Caulk	Brick	Six inches	3/1/2011	3/9/2011	0.076	Unregulated
11EPC	Exterior Window Sill Cap Caulk	Brick	Twelve inches	3/1/2011	3/9/2011	0.071	Unregulated

			Tat	Table 3		
		Surfa	Surface Cover Sample Analytical Results	le Analytical R	esults	
		Int	International Baccalaureate School	calaureate Sch	lool	
			Hartfo	Hartford, CT		
Sample ID	Sample Substrate	Sample Type	Date Collected	Date Analyzed	Total PCBs (mg/kg)	Material Classification
01-SOIL	Soil	Grab	3/15/2011	3/24/2011	0.697	Unregulated
02-SC	Asphalt	Grab	3/15/2011	3/24/2011	0.062	Unregulated
03-SC	Asphalt	Grab	3/15/2011	3/24/2011	0.077	Unregulated
04-SC	Asphalt	Grab	3/15/2011	3/24/2011	2.73	PCB Remediation Waste
05-SC	Asphalt	Grab	3/15/2011	3/24/2011	0.562	Unregulated
OS-90	Concrete	Grab	3/15/2011	3/24/2011	BRL<0.059	Unregulated
OS-20	Concrete	Grab	3/15/2011	3/24/2011	BRL<0.062	Unregulated
O8-80	Asphalt	Grab	3/15/2011	3/24/2011	0.327	Unregulated
<b>DS-60</b>	Asphalt	Grab	3/15/2011	3/24/2011	0.131	Unregulated
10-SC	Asphalt	Grab	3/15/2011	3/24/2011	BRL<0.558	Unregulated
11-SC	Asphalt	Grab	3/15/2011	3/24/2011	BRL<0.539	Unregulated
12-SC	Concrete	Grab	3/15/2011	3/24/2011	0.136	Unregulated
13-SC	Asphalt	Grab	3/15/2011	3/24/2011	0.754	Unregulated
14-SC	Asphalt	Grab	3/15/2011	3/24/2011	BRL<0.560	Unregulated
15-SC	Concrete	Grab	3/15/2011	3/24/2011	0.163	Unregulated

			Tak	Table 3		
A CANADA		Surfa	Surface Cover Sample Analytical Results	ole Analytical F	lesults	management of the state of the
		Int	International Baccalaureate School	calaureate Sch	lool	
			Hartfc	Hartford, CT		
Sample ID	Sample Substrate	Sample Type	Date Collected	Date Analyzed	Total PCBs (mg/kg)	Material Classification
16-SC	Concrete	Grab	3/15/2011	3/24/2011	BRL<0.069	Unregulated
17-SC	Concrete	Grab	3/15/2011	3/24/2011	BRL<0.068	Unregulated
18-SC	Concrete	Grab	3/15/2011	3/24/2011	BRL<0.069	Unregulated
19-SC	Concrete	Grab	3/15/2011	3/24/2011	BRL<0.066	Unregulated
20-SC	Concrete	Grab	3/15/2011	3/24/2011	BRL<0.068	Unregulated
21-SC	Concrete	Grab	3/15/2011	3/24/2011	0.082	Unregulated
22-SC	Concrete	Grab	3/15/2011	3/24/2011	BRL<0.069	Unregulated
23-SC	Concrete	Grab	3/15/2011	3/24/2011	BRL<0.068	Unregulated
24-SC	Soil	Grab	3/15/2011	3/24/2011	0.069	Unregulated
25-SC	Asphalt	Grab	3/15/2011	3/24/2011	BRL<0.192	Unregulated
26-SC	Asphalt	Grab	3/15/2011	3/24/2011	BRL<0.067	Unregulated
27-SC	Soil	Grab	3/15/2011	3/24/2011	90.0	Unregulated
28-SC	Soil	Grab	3/15/2011	3/24/2011	0.092	Unregulated
29-SC	Concrete	Grab	3/15/2011	3/24/2011	BRL<0.069	Unregulated
30-80	Concrete	Grab	3/15/2011	3/24/2011	0.126	Unregulated

			Tak	Table 3		
	ALONE MAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	Surfa	Surface Cover Sample Analytical Results	le Analytical R	esults	
		Int	International Baccalaureate School	calaureate Sch	lool	
			Hartfc	Hartford, CT		
Sample ID	Sample Substrate	Sample Type	Date Collected	Date Analyzed	Total PCBs (mg/kg)	Material Classification
31-SC	Concrete	Grab	3/15/2011	3/24/2011	BRL<0.055	Unregulated
32-SC	Concrete	Grab	3/15/2011	3/24/2011	BRL<0.054	Unregulated
33-SC	Concrete	Grab	3/15/2011	3/24/2011	0.078	Unregulated
34-SC	Concrete	Grab	3/15/2011	3/24/2011	BRL<0.059	Unregulated
35-SC	Concrete	Grab	3/15/2011	3/24/2011	BRL<0.062	Unregulated
38-SC	Concrete	Grab	3/15/2011	3/24/2011	BRL<0.062	Unregulated
37-SC	Concrete	Grab	3/15/2011	3/24/2011	BRL<0.060	Unregulated
38-SC	Concrete	Grab	3/15/2011	3/24/2011	BRL<0.063	Unregulated
39-SC	Concrete	Grab	3/15/2011	3/24/2011	BRL<0.056	Unregulated
40-SC	Asphalt	Grab	3/15/2011	3/24/2011	0.244	Unregulated
41-SC	Asphalt	Grab	3/15/2011	3/24/2011	2.26	PCB Remediation Waste
42-SC	Asphalt	Grab	3/15/2011	3/24/2011	0.657	Unregulated
43-SC	Asphalt	Grab	3/15/2011	3/24/2011	909.0	Unregulated
44-SC	Asphalt	Grab	3/15/2011	3/24/2011	0.653	Unregulated
45-SC	Asphalt	Grab	3/15/2011	3/24/2011	0.299	Unregulated

			Tat	Table 3		
	The state of the s	Surfa	ce Cover Samp	Surface Cover Sample Analytical Results	esuits	
		Int	ternational Bac	International Baccalaureate School	100	
			Hartfe	Hartford, CT		
Sample ID	Sample Substrate	Sample Type	Date Collected	Date Analyzed	Total PCBs (mg/kg)	Material Classification
46-SC	Asphalt	Grab	3/15/2011	3/24/2011	1.52	PCB Remediation Waste
47-SC	Asphalt	Grab	3/15/2011	3/24/2011	0.327	Unregulated
48-SC	Concrete	Grab	3/15/2011	3/24/2011	0.085	Unregulated
49-SC	Concrete	Grab	3/15/2011	3/24/2011	BRL<0.063	Unregulated
20-SC	Concrete	Grab	3/15/2011	3/24/2011	BRL<0.066	Unregulated
50A-SC	Concrete	Grab	3/18/2011	3/24/2011	0.0922	Unregulated
51-SC	Asphalt	Grab	3/18/2011	3/24/2011	4.01	PCB Remediation Waste
52-SC	Asphalt	Grab	3/18/2011	3/24/2011	0.836	Unregulated
23-8C	Asphalt	Grab	3/18/2011	3/24/2011	0.479	Unregulated
54-SC	Asphalt	Grab	3/18/2011	3/24/2011	2.59	PCB Remediation Waste
55-SC	Asphalt	Grab	3/18/2011	3/24/2011	0.747	Unregulated
28-9s	Asphalt	Grab	3/18/2011	3/24/2011	1.07	PCB Remediation Waste
57-SC	Asphalt	Grab	3/18/2011	3/24/2011	0.979	Unregulated
58-SOIL	Soil	Grab	3/18/2011	3/24/2011	0.313	Unregulated
59-SOIL	Soil	Grab	3/18/2011	3/24/2011	1.59	Regulated

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			Tat	Table 3		
		Surfa	Surface Cover Sample Analytical Results	ole Analytical F	esults	
		<b>In</b> t	International Baccalaureate School	calaureate Sch	lool	
			Hartfc	Hartford, CT		
Sample ID	Sample Substrate	Sample Type	Date Collected	Date Analyzed	Total PCBs (mg/kg)	Material Classification
ROS-09	Soil	Grab	3/18/2011	3/24/2011	0.153	- Unregulated
61-SOIL	Soil	Grab	3/18/2011	3/24/2011	0.275	Unregulated
62-SOIL	Soil	Grab	3/18/2011	3/24/2011	2.22	PCB Remediation Waste
93-SC	Concrete	Grab	3/18/2011	3/24/2011	BRL<0.065	Unregulated
64-SC	Concrete	Grab	3/18/2011	3/24/2011	0.917	Unregulated
2S-59	Concrete	Grab	3/18/2011	3/24/2011	1.00	PCB Remediation Waste
OS-99	Concrete	Grab	3/18/2011	3/24/2011	BRL<0.068	Unregulated
97-SC	Concrete	Grab	3/18/2011	3/24/2011	0.507	Unregulated
2S-89	Concrete	Grab	3/18/2011	3/24/2011	BRL<0.064	Unregulated
OS-69	Concrete	Grab	3/18/2011	3/24/2011	BRL<0.059	Unregulated
20-SC	Concrete	Grab	3/18/2011	3/24/2011	0.149	Unregulated
71-SC	Concrete	Grab	3/18/2011	3/24/2011	BRL<0.061	Unregulated
72-SC	Concrete	Grab	3/18/2011	3/24/2011	0.094	Unregulated
73-SC	Concrete	Grab	3/18/2011	3/24/2011	0.105	Unregulated
74-SC	Concrete	Grab	3/18/2011	3/24/2011	0.565	Unregulated

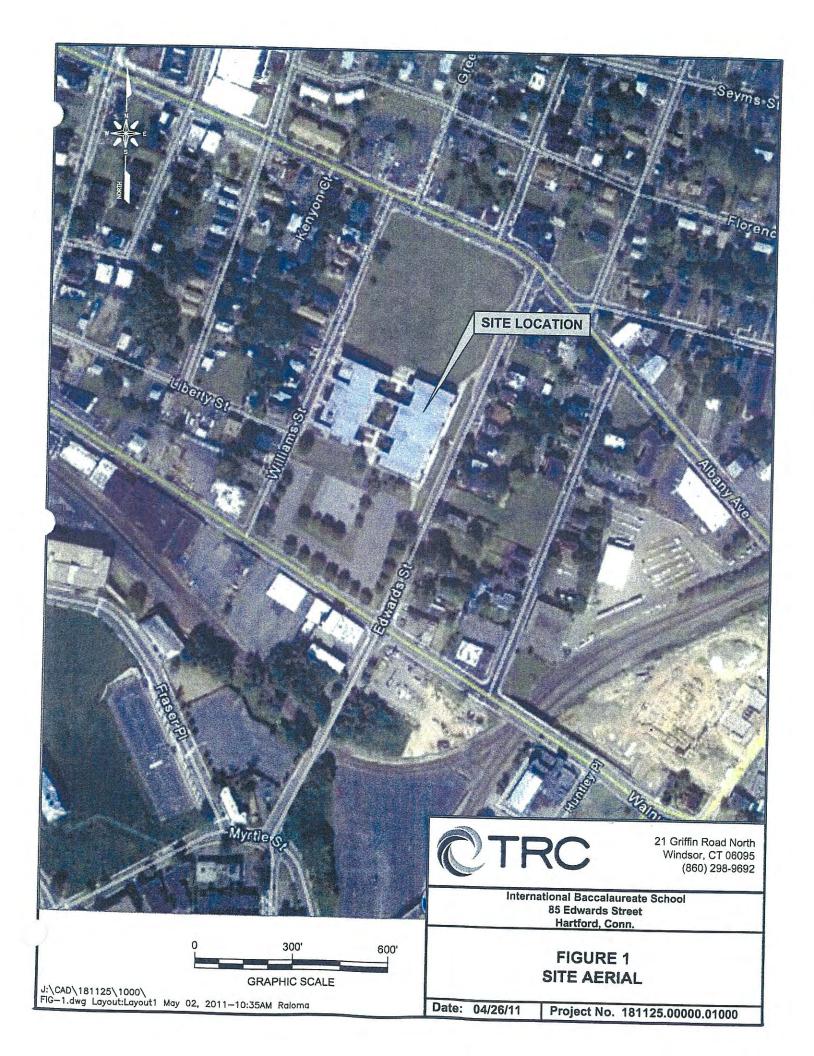
			Tat	Table 3		
		Surfa	Surface Cover Sample Analytical Results	ole Analytical R	esults	
		·	International Baccalaureate School	calaureate Sch	1001	
			Hartfc	Hartford, CT		
Sample ID	Sample Substrate	Sample Type	Date Collected	Date Analyzed	Total PCBs (mg/kg)	Material Classification
75-SC	Concrete	Grab	3/18/2011	3/24/2011	0.235	Unregulated
28-9Z	Concrete	Grab	3/18/2011	3/24/2011	0.07	Unregulated
77-SC	Concrete	Grab	3/18/2011	3/24/2011	1.39	PCB Remediation Waste
28-8C	Concrete	Grab	3/18/2011	3/24/2011	0.076	Unregulated
28-67	Concrete	Grab	3/18/2011	3/24/2011	8.78	PCB Remediation Waste
3S-08	Concrete	Grab	3/18/2011	3/24/2011	0.076	Unregulated
81-SC	Concrete	Grab	3/18/2011	3/24/2011	0.091	Unregulated
82-SC	Concrete	Grab	3/18/2011	3/24/2011	BRL<0.061	Unregulated
83-SC	Concrete	Grab	3/18/2011	3/24/2011	0.087	Unregulated
84-SC	Concrete	Grab	3/18/2011	3/24/2011	BRL<0.059	Unregulated
35-SC	Concrete	Grab	3/18/2011	3/24/2011	0.484	Unregulated
2S-98	Concrete	Grab	3/18/2011	3/24/2011	0.553	Unregulated
87-SC	Concrete	Grab	3/18/2011	3/24/2011	BRL<0.061	Unregulated
98-SC	Concrete	Grab	3/18/2011	3/24/2011	0.639	Unregulated
99-SC	Concrete	Grab	3/18/2011	3/24/2011	BRL<0.062	Unregulated

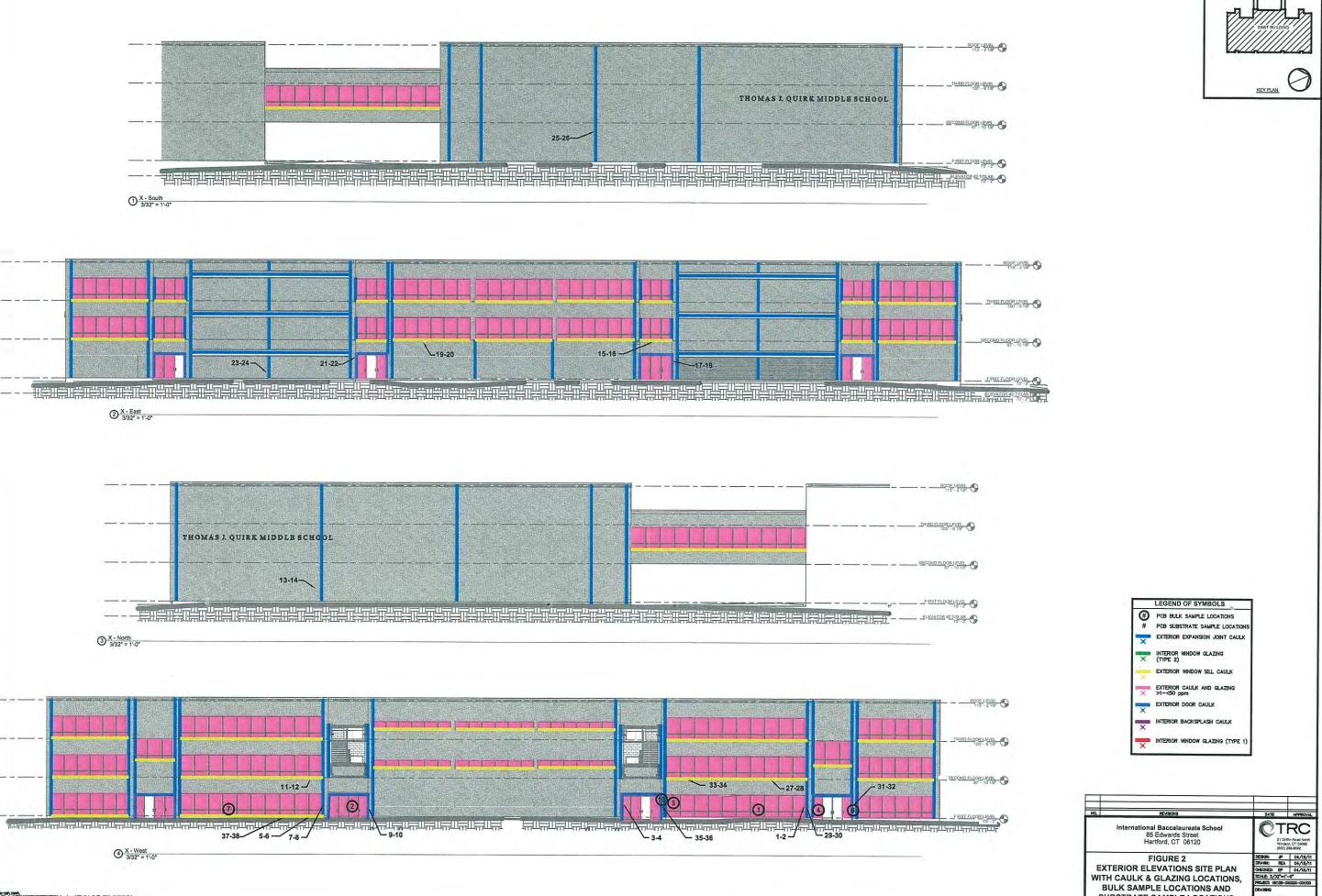
î

			Tat	Table 3		
	The property of the state of th	Surfa	Surface Cover Sample Analytical Results	ole Analytical R	esults	
		Int	International Baccalaureate School	calaureate Sch	lool	
			Hartfe	Hartford, CT		
Sample ID	Sample Substrate	Sample Type	Date Collected	Date Analyzed	Total PCBs (mg/kg)	Material Classification
08-06	Concrete	Grab	3/18/2011	3/24/2011	BRL<0.066	· · · · Unregulated
91-SC	Concrete	Grab	3/18/2011	3/24/2011	BRL<0.061	Unregulated
92-SC	Concrete	Grab	3/18/2011	3/24/2011	0.332	Unregulated
93-SC	Concrete	Grab	3/18/2011	3/24/2011	BRL<0.061	Unregulated
94-SC	Concrete	Grab	3/18/2011	3/24/2011	0.421	Unregulated
2S-36	Concrete	Grab	3/18/2011	3/24/2011	0.156	Unregulated
OS-96	Concrete	Grab	3/18/2011	3/24/2011	0.067	Unregulated
97-SOIL	Soil	Grab	3/18/2011	3/24/2011	1.42	PCB Remediation Waste
7IOS-86	Soil	Grab	3/18/2011	3/24/2011	0.177	Unregulated
71OS-66	Soil	Grab	3/18/2011	3/24/2011	2.2	PCB Remediation Waste
100-SOIL	Soil	Grab	3/18/2011	3/24/2011	0.243	Unregulated
101-SC	Asphalt	Grab	3/18/2011	3/24/2011	0.992	Unregulated
102-SC	Asphalt	Grab	3/18/2011	3/24/2011	0.499	Unregulated
103-SC	Asphalt	Grab	3/18/2011	3/24/2011	0.171	Unregulated

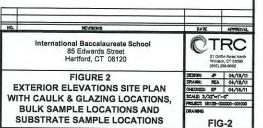
<u> </u>			Table 4	
		Quantification of Materials to	Quantification of Materials to be Abated and Verification Sample Estimate	Estimate
		Internatio	International Baccalaureate School	
-	PCB Bulk Product	na Locations	narnord, Connecticut Comments	Verification Samples
	Exterior Expansion Joint Caulk	Located between joints in the exterior brick façade, along the vertical sides of the windows and along the horizontal length of the mechanical room intake vents	Bulk material samples collected at 0", 3", 6" and 12" beyond contact point. Sample results indicated no penetration of PCBs into surrounding porous brick past 3". Removal will create 1840 LF of newly exposed surfaces.	1 sample per 50 LF of newly exposed surfaces. 37 verification samples to be collected.
	Exterior Window Sill Cap Caulk	Located below the metal window sill cap where it meets the brick façade on the second and third floors and where it meets concrete on the first floor	Bulk material samples collected at 0", 3", 6" and 12" beyond contact point. Sample results indicated no penetration of PCBs into surrounding porous brick past 3". Removal will create 1012 LF of newly exposed surfaces. Metal window sill cap will be disposed of as PCB waste.	1 sample per 50 LF of newly exposed surfaces. 20 verification samples to be collected.
	Exterior Door Caulk	Located along the metal door frames where it meets the brick façade.	Bulk ma and 12" b indic surroun will creat	1 sample per 50 LF of newly exposed surfaces. 4 verification samples to be collected.
-	State Regulated PCB-Material	Locations	Comments	Verification Samples
_	Exterior Window Glazing	Located throughout all exterior windows.	Glazing in contact with non-porous glass window and non-porous metal window sash. Whole window will be disposed of as PCB waste.	None
	Exterior Door Window Glazing Type 1	Located throughout the exterior door windows.	Caulk in contact with porous brick and non- porous metal doors. Whole doors will be disposed of has PCB waste.	None

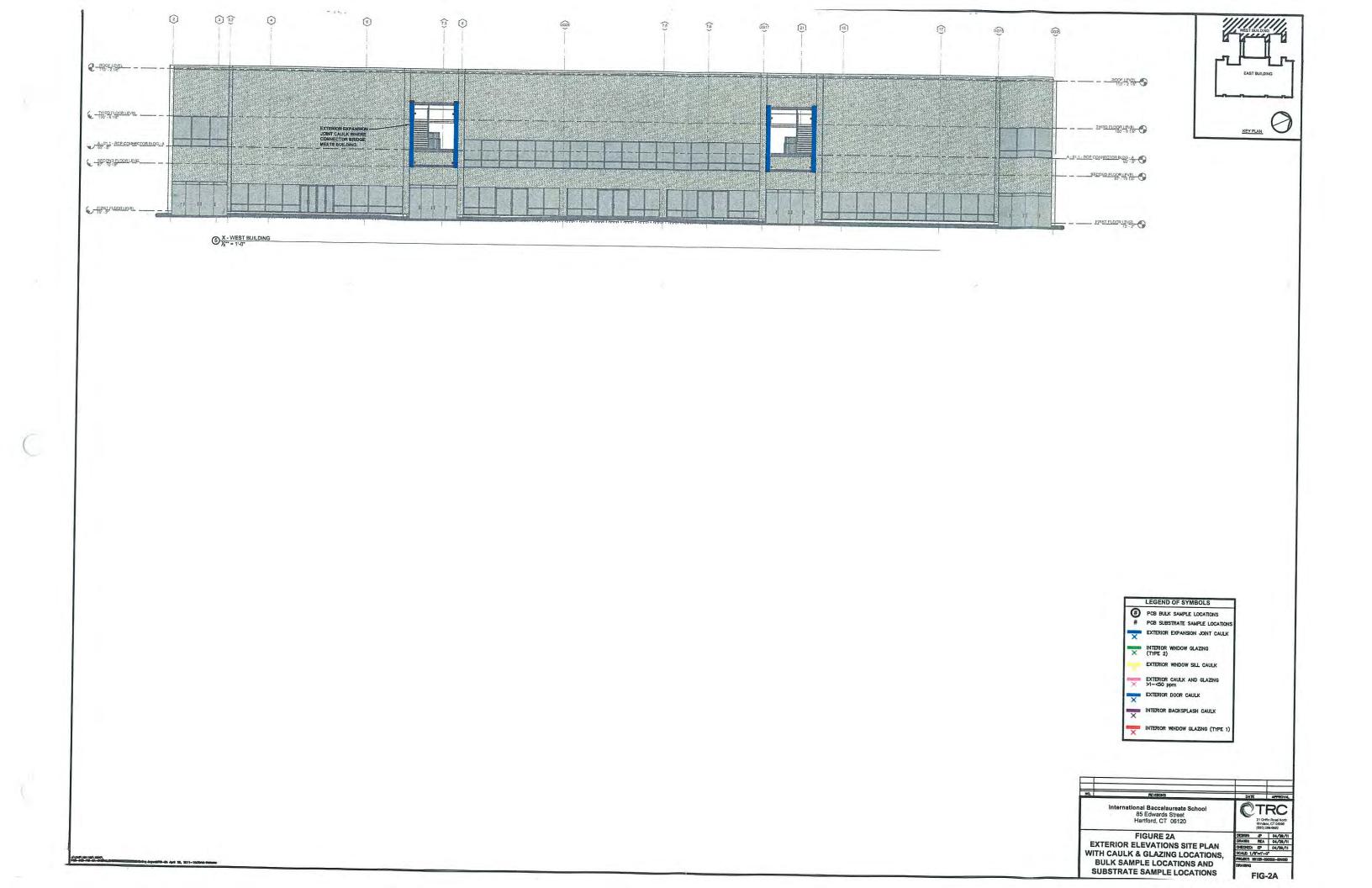
		Table 4	
	Quantification of Materials to	Quantification of Materials to be Abated and Verification Sample Estimate	Estimate
	Internatio	ternational Baccalaureate School	***************************************
	H	Hartford, Connecticut	
Exterior Door Window Glazing Type 3	Located on two out of twenty-eight exterior door windows	Glazing in contact with non-porous glass window and non-porous metal door. Whole door will be disposed of as PCB waste.	None
Exterior Window Caulk	Located throughout all exterior windows.	Caulk in contact with porous brick and non- porous non-porous metal window frames. Whole windows will be disposed of has PCB waste.	None
Interior Caulk Type 1(C1 - on Countertops)	Located on Formica countertops where the counter and backsplash meet in Rooms 103, 105, 110, 113, 115, 116, 118, 211 A, 211B, 308, 311A, 311B, 325.	Caulk in contact with non-porous Formica counter & backsplash surface at point of contact. Whole counter will be disposed of as PCB waste.	None
Interior Window Glazing Type 2	Located throughout the interior windows in Rooms 102, 106, 112, 113, 209, 210, 223, 224, 309, 310, 323, 324, 2nd & 3rd Floor Administrative Suites.	Glazing in contact with glass window and metal window sash. Whole window will be disposed of as PCB waste.	None
Interior Window Glazing Type 1	Located on the interior side of all the exterior windows.	Glazing in contact with glass window and metal window sash. Whole window will be disposed of as PCB waste.	None
Light gray caulk	Located on the roof skylight.	Caulk in contact with glass skylight and metal skylight frame. Whole skylight will be disposed of as PCB waste.	None
Dark gray caulk	Located on the roof skylight.	Caulk in contact with glass skylight and metal skylight frame. Whole skylight will be disposed of as PCB waste.	anoN
Red caulk	Located on the roof skylight.	Caulk in contact with glass skylight and metal skylight frame. Whole skylight will be disposed of as PCB waste.	

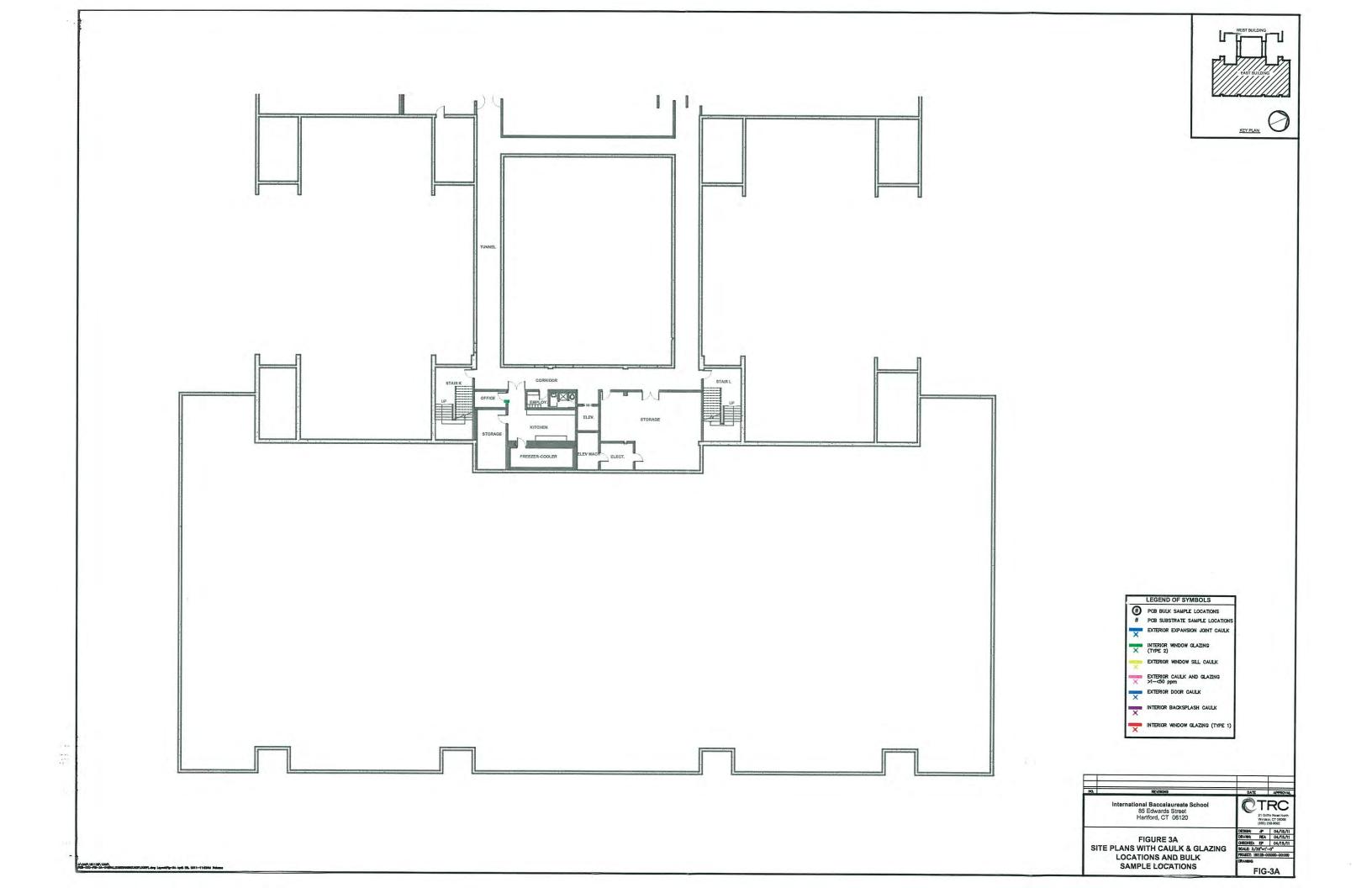


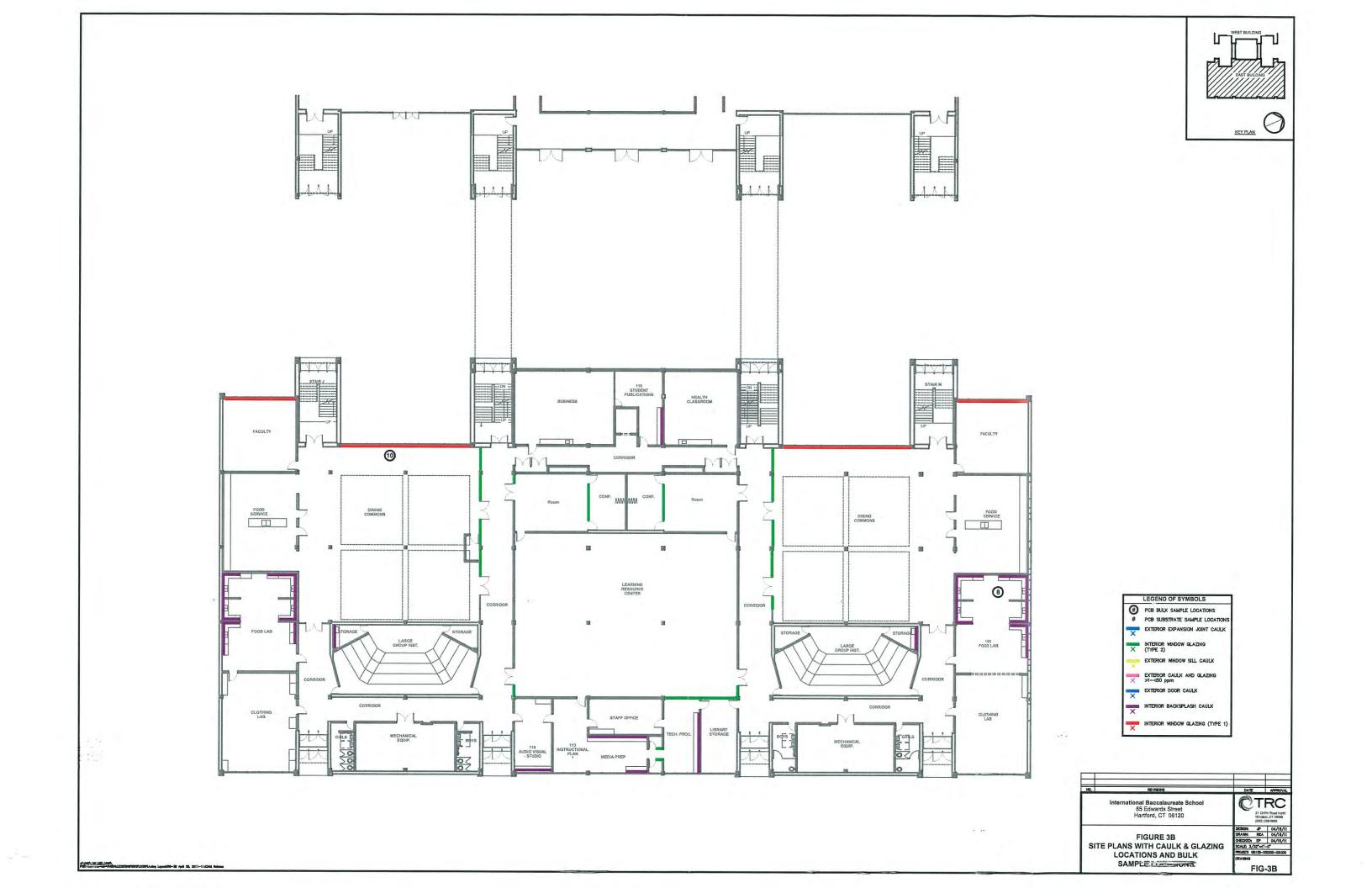


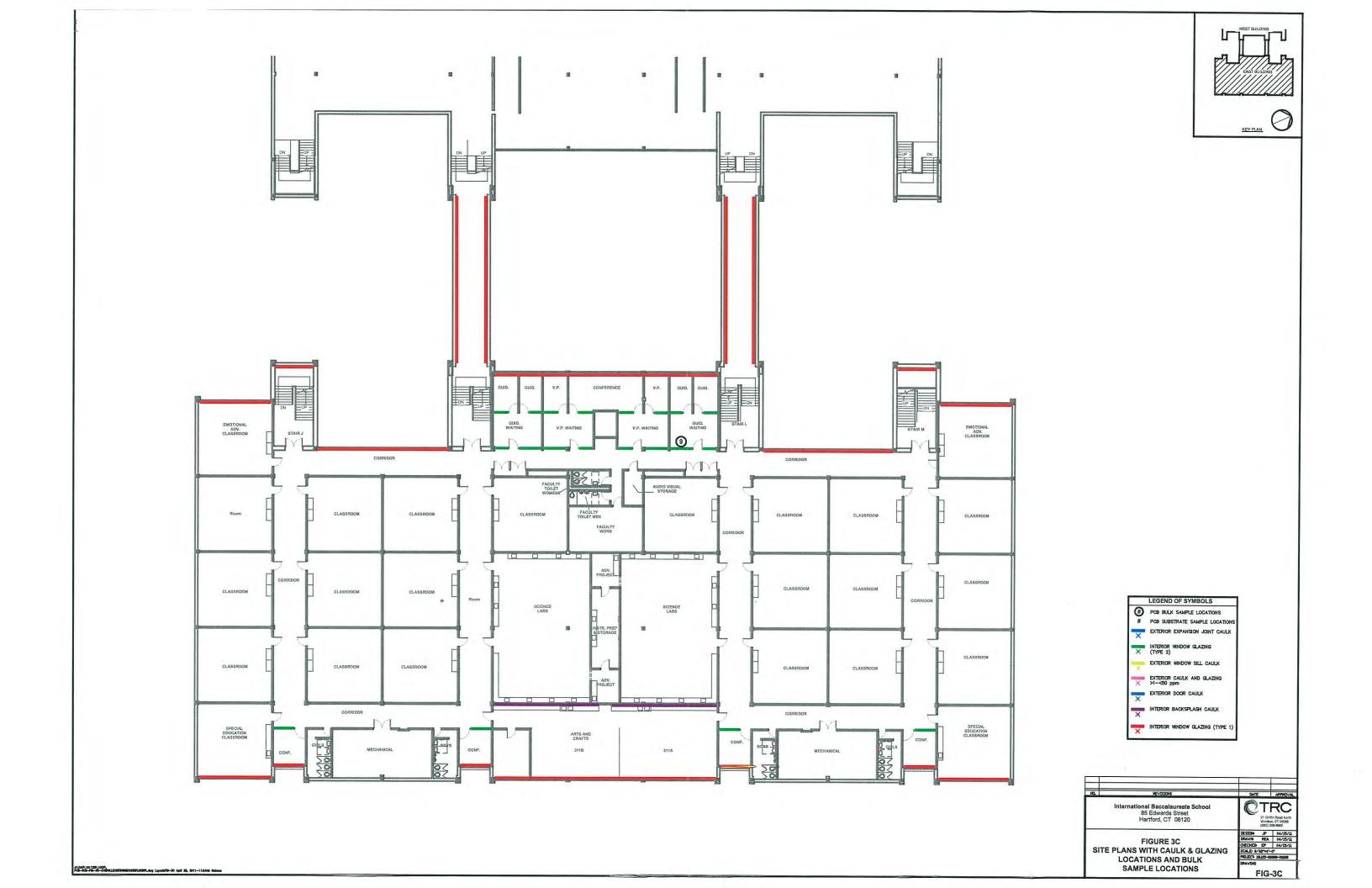


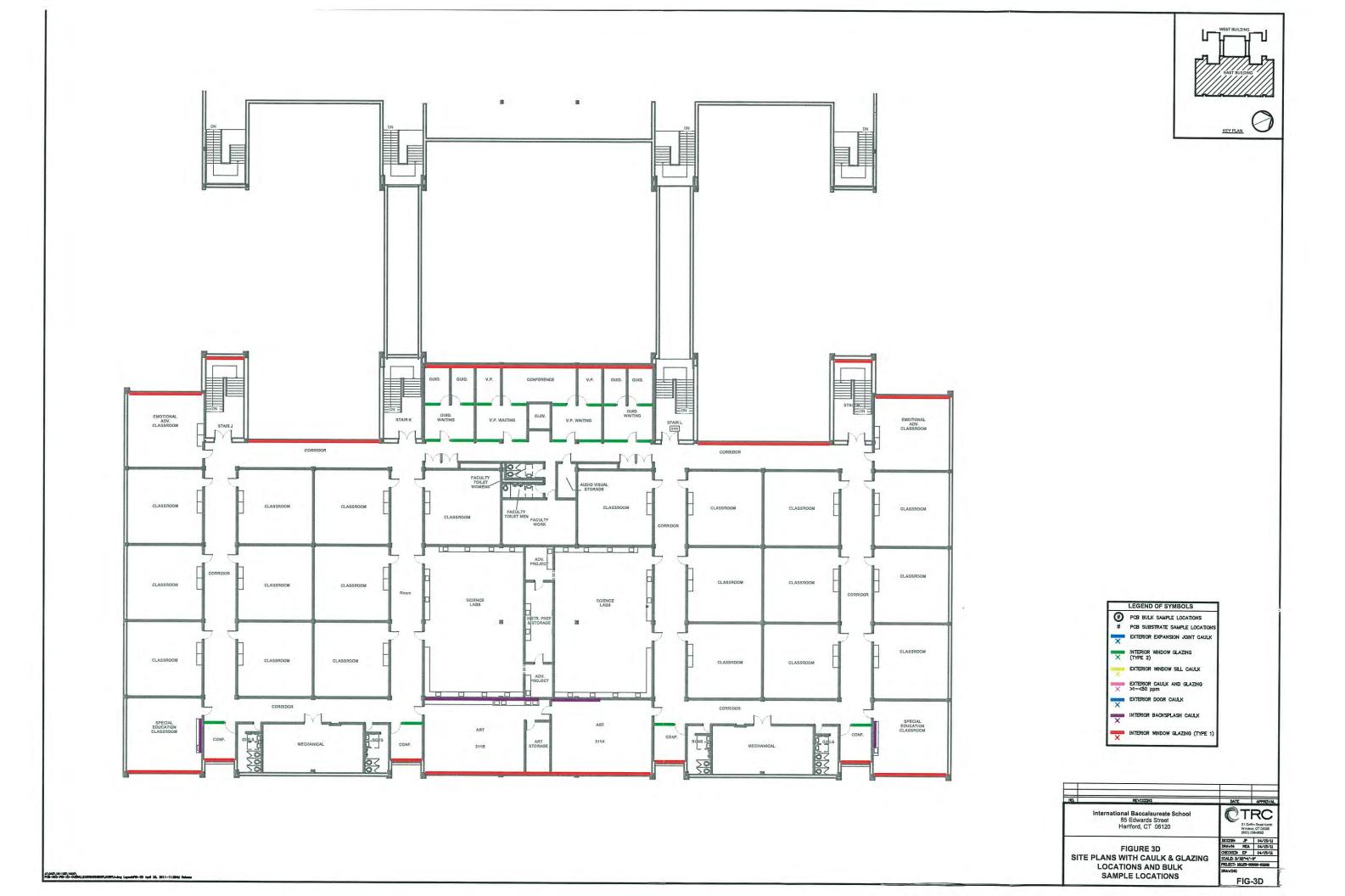


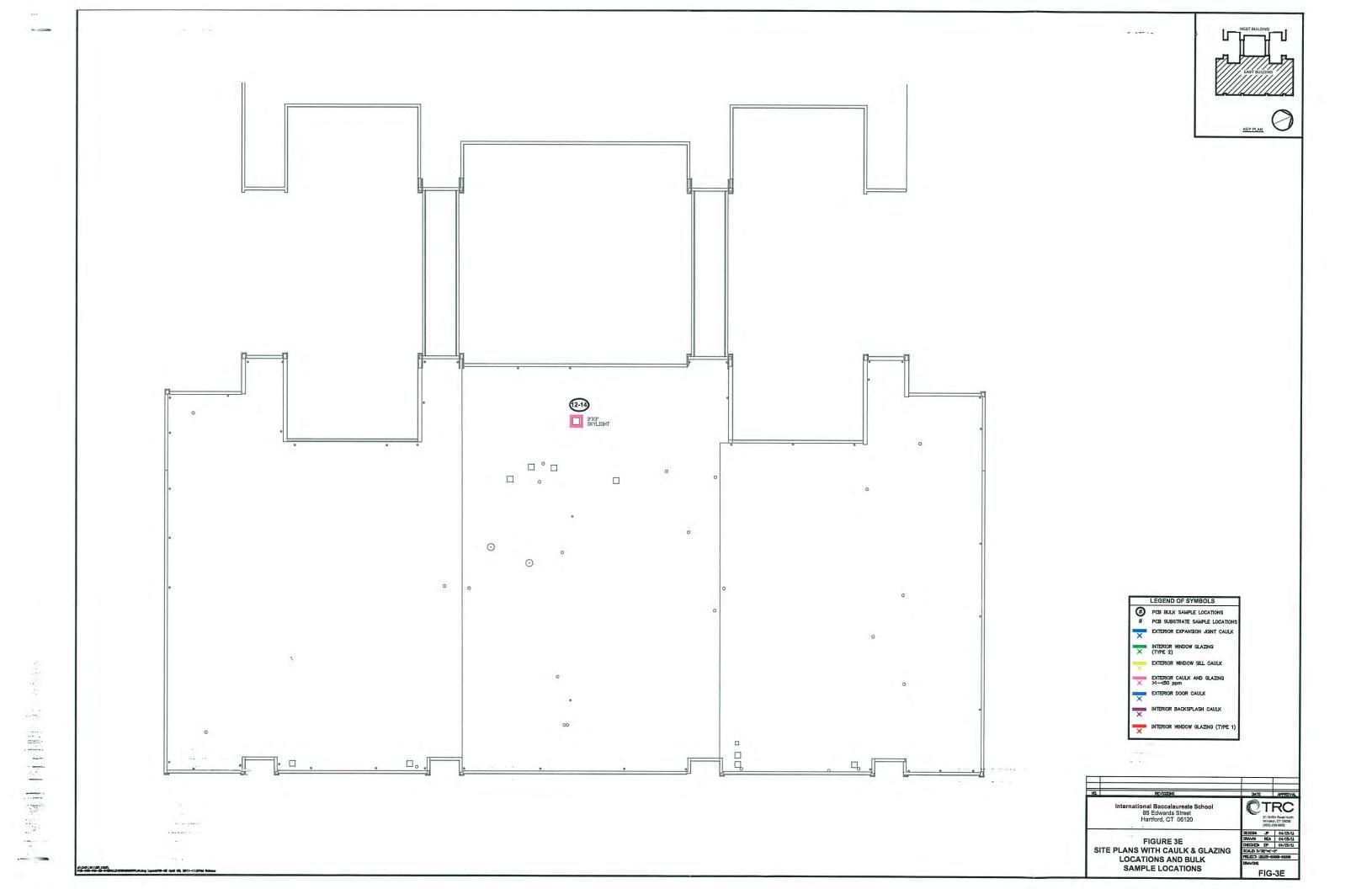


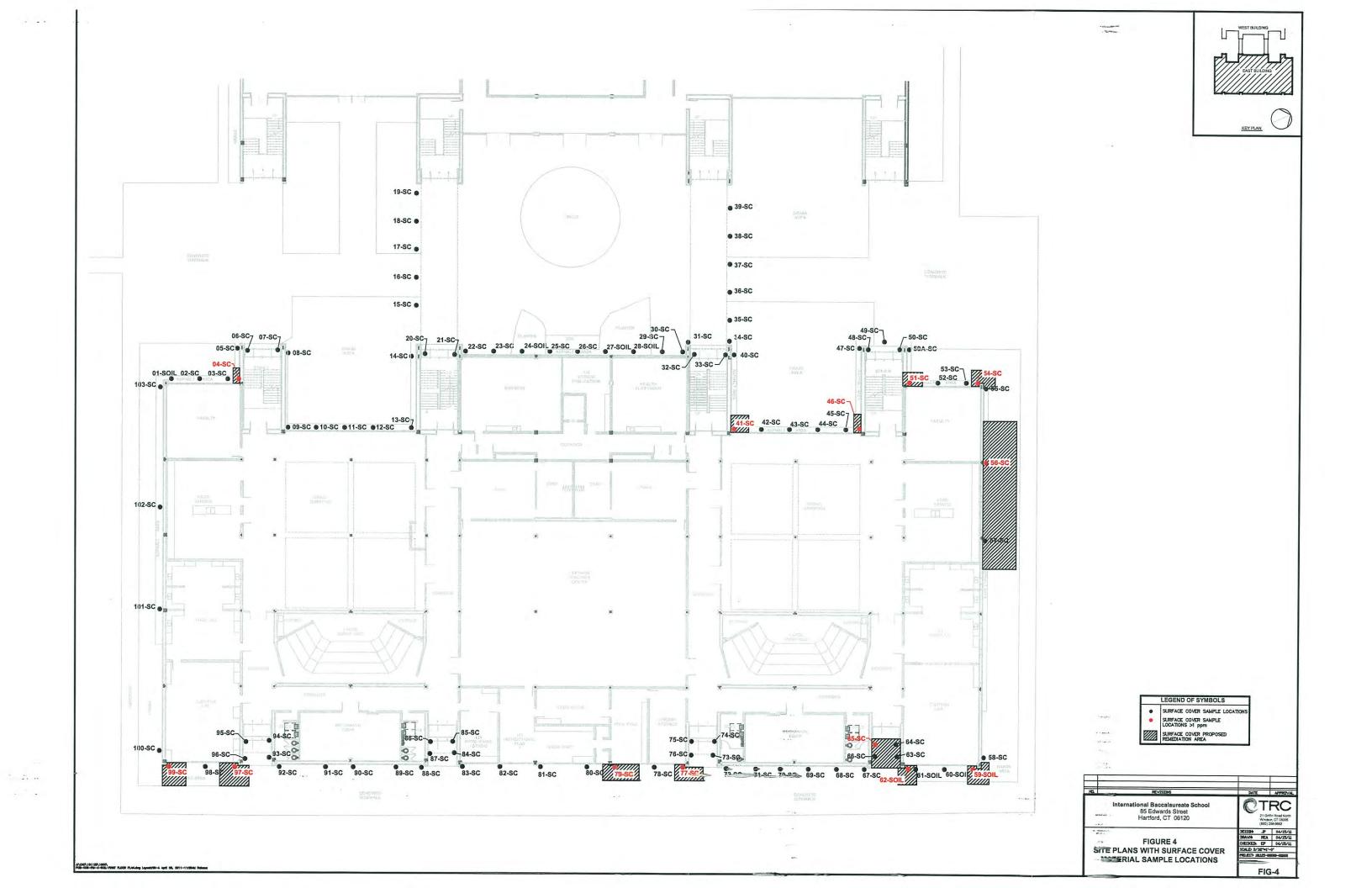












# APPENDIX A Analytical Data Reports



80 Lupes Drive` Stratford, CT 06615 Tel: (203) 377-9984 Fax: (203) 377-9952 e-mail: cet1@cetlabs.com

Client:

Ms. Jennifer Peshka

TRC Environmental Consultants

21 Griffin Rd., North Windsor, CT 06095

PCB

# **Analytical Report**

**CET # 11020047** 

Report Date: February 15, 2011

Client Project: Quirk Middle School, Hartford

Client Project #: 181125.1000.0000



Page 2 of 4

February 15, 2011

Project#: 181125.1000.0000

CET#: 11020047

Project: Quirk Middle School, Hartford

# **SAMPLE SUMMARY:**

This report contains analytical data associated with the following samples only:

CETID	Client Sample ID	Matrix	Collection Date	Collection Time	Receipt Date
AE62319	1	Solid	1/26/2011	10:15	02/04/2011
AE62320	2	Solid	1/26/2011	9:30	02/04/2011
AE62321	3	Solid	1/26/2011	12:45	02/04/2011
AE62322	4	Solid	1/26/2011	13:40	02/04/2011
AE62323	5	Solid	1/26/2011	10:10	02/04/2011
AE62324	6	Solid	1/26/2011	9:02	02/04/2011
AE62325	7	Solid	1/26/2011	9:10	02/04/2011
AE62326	8	Solid	1/26/2011	14:50	02/04/2011
AE62327	9	Solid	1/26/2011	14:50	02/04/2011
AE62328	10	Solid	1/28/2011	15:15	02/04/2011

Sample temperature upon receipt was 4.0 degrees C

# **PREP ANALYSIS:**

Soxhlet Extraction [EPA 3540C]

Client ID	1	2	3	4	5
CET ID	AE62319	AE62320	AE62321	AE62322	AE62323
Date Analyzed	2/8/2011	2/8/2011	2/8/2011	2/8/2011	2/8/2011

Soxhlet Extraction [EPA 3540C]

		· <u>,</u>			
Client ID	6	7	8	9	10
CET ID	AE62324	AE62325	AE62326	AE62327	AE62328
Date Analyzed	2/8/2011	2/8/2011	2/8/2011	2/8/2011	2/8/2011

# **ANALYSIS:**

EPA 8082 PCBs [EPA 8082] Units: mg/kg (Dry Wt)

Client ID	1	2	3	4	5
CET ID	AE62319	AE62320	AE62321	AE62322	AE62323
Date Analyzed	2/11/2011	2/11/2011	2/11/2011	2/11/2011	2/11/2011
Dilution	50.0	1.0	1.0	10.0	20.0
PCB-1016	ND < 13	ND < 0.30	ND < 0.30	ND < 2.5	ND < 5.0
PCB-1221	ND < 13	ND < 0.30	ND < 0.30	ND < 2.5	ND < 5.0
PCB-1232	ND < 13	ND < 0.30	ND < 0.30	ND < 2.5	ND < 5.0
PCB-1242	ND < 13	ND < 0.30	ND < 0.30	ND < 2.5	ND < 5.0
PCB-1248	21	ND < 0.30	ND < 0.30	ND < 2.5	ND < 5.0
PCB-1254	14	1.1	0.90	13	17
PCB-1260	ND < 13	ND < 0.30	ND < 0.30	ND < 2.5	ND < 5.0
PCB-1268	ND < 13	ND < 0.30	ND < 0.30	ND < 2.5	ND < 5.0
TCMX (Surr 1) 50-150	102	85	49	99	61
DCB (Surr 2) 50-150	105	107	30	101	59

Project#: 181125.1000.0000

Page 3 of 4

February 15, 2011

CET#: 11020047

Project: Quirk Middle School, Hartford

EPA 8082 PCBs [EPA 8082] Units: mg/kg (Dry Wt)

DITT 0002 I CD3 [LI	ri cocz j Omics	· · · · · · · · · · · · · · · · · · ·	**		
Client ID	6	7	8	9	10
CET ID	AE62324	AE62325	AE62326	AE62327	AE62328
Date Analyzed	2/14/2011	2/14/2011	2/11/2011	2/11/2011	2/11/2011
Dilution	100000.0	100000.0	6.7	1.0	50.0
PCB-1016	ND < 25000	ND < 25000	ND < 1.7	ND < 0.30	ND < 13
PCB-1221	ND < 25000	ND < 25000	ND < 1.7	ND < 0.30	ND < 13
PCB-1232	ND < 25000	ND < 25000	ND < 1.7	ND < 0.30	ND < 13
PCB-1242	ND < 25000	ND < 25000	ND < 1.7	ND < 0.30	ND < 13
PCB-1248	ND < 25000	ND < 25000	ND < 1.7	ND < 0.30	ND < 13
PCB-1254	100000	56000	2.2	1.1	29
PCB-1260	ND < 25000	ND < 25000	ND < 1.7	ND < 0.30	ND < 13
PCB-1268	ND < 25000	ND < 25000	ND < 1.7	ND < 0.30	ND < 13
TCMX (Surr 1) 50-150	+	+	60	86	111
DCB (Surr 2) 50-150	+	+	80	70	110

<sup>+</sup>Surrogate diluted out.

Assumed 100% Total Solids for all samples.

Questions related to this report should be directed to David Ditta, Timothy Fusco, or Robert Blake at 203-377-9984.

Sincerely,

David Ditta

Laboratory Director

#### Report Comments:

- 1. ND is None Detected at the specified detection limit.
- 2. All analyses were performed in house unless a Reference Laboratory is listed.
- 3. Samples will be disposed of 30 days after the report date.
- 4. Sample Result Flags:
  - E The result is estimated, above the calibration range.
  - H The surrogate recovery is above the control limits.
  - L The surrogate recovery is below the control limits.
  - B The compound was detected in the laboratory blank.
  - P The Relative Percent Difference (RPD) of dual column analyses exceeds 40%.
  - D The RPD between the sample and the sample duplicate is high. Sample homogeneity may be a problem.
- 5. All results met standard operating procedures unless indicated by a data qualifier next to a sample result, or a narration in the QC report.

1 CRIFFIN RD NORTH   WINDSOR, CONNECTICUT 06095   TELEPHONE (860) 298-6393   PROJECT NAME   PROJECT NAME   PROJECT NAME   PARAMETT   ISSUE   SAMPLE   DATE   TIME   E					
SOR, CONNECTICUT 06095   PROJECT NAME					
CTOR: (SIGNATURE)	OF CUSTODY				
CTOR: (SIGNATURE)		LAB ID #.			
CTOR: (SIGNATURE)		İΙ	TURNAROUND TIME	TIME	
CTOR: (SIGNATURE)   Jennifer Peshka & Jonathon Gentile	PARAMETERS	PLM: 24hr	48br	3day	g g
126/11   1015   X   Exterior window glaze type 1   1/26/11   1016   X   Exterior door window glaze type 1   1/26/11   1045   X   Exterior door window glaze type 2   1/26/11   1040   X   Exterior door window glaze type 3   1/26/11   1040   X   Exterior window glaze type 3   1/26/11   1050   X   Exterior window glaze type 2   1/26/11   1450   X   Exterior window glazing type 2   1/26/11   1450   X   Interior window glazing type 1   1/26/11   1450   X   Interior window glazing type 1   1/26/11   1515   X   Interior window glazing type 1   1/26/11   1515   X   Interior window glazing type 1   1/26/11		1	1101	(gpc-	Cap.
PLE   DATE   TIME   E   R   MATERIAL					
DATE   TIME   P.	SE) 72				
1/26/11   1015   X   Exterior window glaze type 1   1/26/11   1245   X   Exterior door window glaze type 2   1/26/11   1245   X   Exterior door window glaze type 2   1/26/11   1340   X   Exterior window gaze type 3   1/26/11   1010/   X   Exterior window caulk   1/26/11   10902   X   Exterior window caulk   1/26/11   1450   X   Exterior parapet cap caulk   1/26/11   1450   X   Exterior parapet cap caulk   1/26/11   1450   X   Interior window glazing type 1   1/26/11   1515   X   Interior window glazing type 1	E L Y 808				
1/26/11   1245   X   Exterior door window glaze type 1   1/26/11   1245   X   Exterior door window glaze type 2   1/26/11   1340   X   Exterior door window glaze type 3   1/26/11   1010/   X   Exterior window caulk   1/26/11   0910   X   Exterior window caulk   1/26/11   1450   X   Exterior parapet cap caulk   1/26/11   1450   X   Interior window glazing type 2   1/26/11   1450   X   Interior window glazing type 1   1/26/11   1515   X   Interior window glazing type 1   1/26/11   1515   X   Interior window glazing type 1   1/26/11   1515   X   Interior window glazing type 1   1/26/11   1/	Х				
1/26/11   1245   X   Exterior door window glaze type 2   1/26/11   1340   X   Exterior door window glaze type 3   1/26/11   1010/   X   Exterior window caulk   1/26/11   0902   X   Exterior expansion joint caulk   1/26/11   1450   X   Exterior parapet cap caulk   1/26/11   1450   X   Interior caulk type 1   1/26/11   1450   X   Interior window glazing type 2   1/26/11   1515   X   Interior window glazing type 1   1/28/11   1515   X   Interior window glazing type 1					
1/26/11   1340   X   Exterior door window glaze type 3   1/26/11   1010/   X   Exterior window caulk   1/26/11   0902   X   Exterior expansion joint caulk   1/26/11   1450   X   Exterior parapet cap caulk   1/26/11   1450   X   Interior window glazing type 2   1/26/11   1515   X   Interior window glazing type 1   1/28/11					
1/26/11   1010/   X   Exterior window caulk   1/26/11   0902   X   Exterior expansion joint caulk   1/26/11   0910   X   Exterior parapet cap caulk   1/26/11   1450   X   Interior caulk type   1/26/12   1/26/11   1450   X   Interior window glazing type 2   1/26/11   1515   X   Interior window glazing type 1   1/28/11   1515   X   Interior window glazing type 1					
1/26/11   0902   X   Exterior expansion joint caulk   1/26/11   0910   X   Exterior parapet cap caulk   1/26/11   1450   X   Interior window glazing type 2   1/26/11   1450   X   Interior window glazing type 2   X   Interior window glazing type 1   1/28/11   1515   X   Interior window glazing type 1   1/28/11   1515   X   Interior window glazing type 1	×				
1/26/11   0910   X   Exterior parapet cap caulk   1/26/11   1450   X   Interior caulk type   \( \int \chick{1} \ch	×				
1/26/11   1450   X   Interior caulk type   Duck; plash-   1/26/11   1450   X   Interior window glazing type 2   1/26/11   1515   X   Interior window glazing type 1   1/28/11   1515   X   Interior window glazing type 1	X				
1/26/11   1450   X   Interior window glazing type 2     1/28/11   1515   X   Interior window glazing type 1	_				
hed by: (Signature)  hed by: (Signature)  hed by: (Signature)  Date: Received by: (Signature)  1/30/11  Peshka  1117  Received by: (Printed)	X				
hed by; (Signature)  Delic: Rectived by (Signature)  1/30/11 Peshka  1117  Rectived by (Signature)  1/30/11 Peshka	X .	,			
had by: (Signature) 1/30/11 Well A-fr/ 1440.  Time: (Printed) 1117 REFECTION	•				
Peshka Time: (Printed BUHHEA)	Relinguished by (Signafure)	1.4.1/	Received by: (Signature)	(Signature)	
	Had ROBEN BOAM	Time: 74 /640	(Printed)	,	
				Page i of 1	

Report Date: 23-Feb-11 14:06



#### SPECTRUM ANALYTICAL, INC. Featuring HANIBAL TECHNOLOGY

# Laboratory Report

TRC 21 Griffin Road North Windsor, CT 06095 Attn: Steve Arienti

Project: HSBC - Hartford, CT

Project #: 181125.1000.000

Laboratory IDClient Sample IDMatrixDate SampledDate ReceivedSB24765-011Door Caulk17-Feb-11 13:0018-Feb-11 16:45

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.

All applicable NELAC requirements have been met.

Massachusetts # M-MA138/MA1110 Connecticut # PH-0777 Florida # E87600/E87936 Maine # MA138 New Hampshire # 2538 New Jersey # MA011/MA012 New York # 11393/11840 Pennsylvania # 68-04426/68-02924 Rhode Island # 98 USDA # S-51435



Authorized by:

Final Report

□ Re-Issued Report

□ Revised Report

Nicole Leja Laboratory Director

Juiole Leja

Spectrum Analytical holds certification in the State of New York for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of New York does not offer certification for all analytes.

Please note that this report contains 7 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Spectrum Analytical, Inc.

Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Spectrum is currently accredited for the specific method or analyte indicated. Please refer to our "Quality" web page at www.spectrum-analytical.com for a full listing of our current certifications and fields of accreditation. States in which Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (NY-11840, FL-E87936 and NJ-MA012).

#### CASE NARRATIVE:

The sample temperature upon receipt by Spectrum Analytical courier was recorded as 4.6 degrees Celsius. The condition of these samples was further noted as refrigerated. The samples were transported on ice to the laboratory facility and the temperature was recorded at 4.1 degrees Celsius upon receipt at the laboratory. Please refer to the Chain of Custody for details specific to sample receipt times.

An infrared thermometer with a tolerance of +/- 2.0 degrees Celsius was used immediately upon receipt of the samples.

If a Matrix Spike (MS), Matrix Spike Duplicate (MSD) or Duplicate (DUP) was not requested on the Chain of Custody, method criteria may have been fulfilled with a source sample not of this Sample Delivery Group.

Required site-specific Matrix Spike/Matrix Spike Duplicate (MS/MSD) must be requested by the client and sufficient sample must be submitted for the additional analyses. Samples submitted with insufficient volume/weight will not be analyzed for site specific MS/MSD, however a batch MS/MSD may be analyzed from a non-site specific sample.

CTDEP has published a list of analytical methods which provides a series of recommended protocols for the acquisition, analysis and reporting of analytical data in support of decisions being made utilizing the Reasonable Confidence Protocol (RCP). "Reasonable Confidence" can be established only for those methods published by the CTDEP in the RCP guidelines. The compounds and/or elements reported were specifically requested by the client on the Chain of Custody and in some cases may not include the full analyte list as defined in the method. Regulatory limits may not be achieved if specific method and/or technique was not requested on the Chain of Custody.

The CTDEP RCP requests that "all non-detects and all results below the reporting limit are reported as ND (Not Detected at the Specified Reporting Limit)". All non-detects and all results below the reporting limit are reported as "BRL" (Below the Reporting Limit) in this report.

If no reporting limits were specified or referenced on the chain-of-custody the laboratory's practical quantitation limits were applied.

Tetrachloro-m-xylene is recommended as a surrogate by the CTDEP RCP for the following SW846 Methods 8081, 8082 and 8151. Spectrum Analytical, Inc. uses Tetrachloro-m-xylene as the Internal Standard for these methods and Dibromooctaflourobiphenyl as the surrogate.

See below for any non-conformances and issues relating to quality control samples and/or sample analysis/matrix.

#### SW846 8082A

#### **Duplicates:**

1103135-DUP1

Source: SB24765-01

The surrogate recovery for this sample is not available due to sample dilution required from high analyte concentration and/or matrix interference's.

4,4-DB-Octafluorobiphenyl (Sr)

4,4-DB-Octafluorobiphenyl (Sr) [2C]

Decachlorobiphenyl (Sr)

Decachlorobiphenyl (Sr) [2C]

#### Samples:

SB24765-01

I

The surrogate recovery for this sample is not available due to sample dilution required from high analyte concentration and/or matrix interference's.

4,4-DB-Octafluorobiphenyl (Sr)

4,4-DB-Octafluorobiphenyl (Sr) [2C]

Decachlorobiphenyl (Sr)

Decachlorobiphenyl (Sr) [2C]

-					
1					
SB24765-01					

Client Project # 181125.1000.000

<u>Matrix</u> Door Caulk Collection Date/Time 17-Feb-11 13:00 Received 18-Feb-11

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082											
Prepared	by method SW846 3540C										4400405	v
12674-11-2	Aroclor-1016	BRL		µg/kg dry	954000	5000	SW846 8082A		23-Feb-11	IMR	1103135	
11104-28-2	Aroclor-1221	BRL		µg/kg dry	954000	5000	**	HT.		н	47	X
11141-16-5	Aroclor-1232	BRL		μg/kg dry	954000	5000	4	)4	н	•	п	X
53469-21-9	Aroclor-1242	BRL		μg/kg dry	954000	5000	Ħ	-	11-	**	er	Х
12672-29-6	Aroclor-1248	BRL		µg/kg dry	954000	5000	#	**	17	4		Х
11097-69-1	Aroclor-1254	46,700,000		µg/kg dry	954000	5000		н	**		**	Х
11096-82-5	Aroclor-1260	BRL		µg/kg dry	954000	5000	**	n	H	17	<b>st</b>	Х
37324-23-5	Aroclor-1262	BRL		µg/kg dry	954000	5000	11	10		e)	n	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	954000	5000	н	н	șt	n	Ħ	×
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	o	S01		30-150 %		i <del>v</del>	и	Ħ	•	н	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	o	S01		30-150 %		•	н	16		et	
2051-24-3	Decachlorobiphenyl (Sr)	o	S01		30-150 %		e	41	н	n		
2051-24-3	Decachlorobiphenyl (Sr) [2C]	o	\$01		30-150 %		1600	14	*1	**	н	
General C	Chemistry Parameters											
	% Solids	93.4		%		1	SM2540 G Mod.	22-Feb-11	22-Feb-11	DT	1103169	3

# Semivolatile Organic Compounds by GC - Quality Control

nalyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
atch 1103135 - SW846 3540C										
Blank (1103135-BLK1)					<u>Pr</u>	epared: 22-i	eb-11 An	alyzed: 23-Fe	<u>:b-11</u>	
Aroclor-1016	BRL		µg/kg wet	400						
Aroclor-1016 [2C]	BRL		µg/kg wet	400						
Aroclor-1221	BRL		µg/kg wet	400						
Aroclor-1221 [2C]	BRL		μg/kg wet	400						
Aroclor-1232	BRL		µg/kg wet	400						
Aroclor-1232 [2C]	BRL		μg/kg wet	400						
Arodor-1242	BRL		μg/kg wet	400						
Aroclor-1242 [2C]	BRL		µg/kg wet	400					٠	
Aroclor-1248	BRL		µg/kg wet	400						
Araclor-1248 [2C]	BRL		μg/kg wet	400						
Aroclor-1254	BRL		μg/kg wet	400						
Aroclor-1254 [2C]	BRL		µg/kg wet	400				*		
Aroclor-1260	BRL		µg/kg wet	400						
Arocior-1260 [2C]	BRL		μg/kg wet	400						
Aroclor-1262	BRL		µg/kg wet	400						
Arodor-1262 [2C]	BRL		µg/kg wet	400						
Aroclor-1268	BRL		μg/kg wet	400						
Arodor-1268 [2C]	BRL		μg/kg wet	400						
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	360		μg/kg wet		400		90	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	390		µg/kg wet		400		98	30-150		
Surrogate: Decachlorobiphenyl (Sr)	324		µg/kg wet		400		81	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	322		µg/kg wet		400		80	30-150		
LCS (1103135-BS1)					<u>P</u>	repared: 22	-Feb-11 A	nalyzed: 23-F	eb-11	
Aroclor-1016	4370		µg/kg wet	400	5000		87	50-140		
Aroclor-1016 [2C]	4660		µg/kg wet	400	5000		93	50-140		
Aroclor-1260	3790		μg/kg wet	400	5000		76	50-140		
Aroclor-1260 [2C]	3870		µg/kg wet	400	5000		77	50-140		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	716		μg/kg wet		800		90	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	742		μg/kg wet		800		93	30-150		
Surrogate: Decachlorobiphenyl (Sr)	684		μg/kg wet		800		86	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	614		μg/kg wet		800		77	30-150		
LCS Dup (1103135-BSD1)					E	repared: 22	-Feb-11 A	nalyzed: 23-f	Feb-11	
Aroclor-1016	4520		µg/kg wet	400	5000		90	50-140	3	30
Aroclor-1016 [2C]	4920		μg/kg wet	400	5000		98	50-140	5	30
Aroclor-1260	3840		μg/kg wet	400	5000		77	50-140	1	30
Aroclor-1260 [2C]	4240		µg/kg wet	400	5000		85	50-140	9	30
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	772.		μg/kg wet		800		96	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	816		μg/kg wet		800		102	30-150		
Surrogate: Decachlorobiphenyl (Sr)	760		μg/kg wet		800		95	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	728		μg/kg wet		800		91	30-150		
Duplicate (1103135-DUP1)			Source: \$E	32 <u>4765-01</u>	Ē	repared: 22	2-Feb-11_ <i>F</i>	Analyzed: 23-	Feb <u>-11</u>	
Arodor-1016	BRL		μg/kg dry	1060000		BRL				40
Aroclor-1016 [2C]	BRL		µg/kg dry	1060000		BRL				40
Aroclor-1221	BRL		µg/kg dry	1060000		BRL				40
Aroclor-1221 [2C]	BRL		µg/kg dry	1060000		BRL				40
Araclar-1232	BRL		μg/kg dry	1060000		BRL				41
Aroclor-1232 [2C]	BRL		μg/kg dry	1060000		BRL				4
Aroclor-1242	BRL		µg/kg d≀y	1060000		BRL				4
Aroclor-1242 [2C]	BRL		µg/kg dry	1060000		BRL				4
Aroclor-1248	BRL		μg/kg dry	1060000		BRL				4

# Semivolatile Organic Compounds by GC - Quality Control

.nalyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
atch 1103135 - SW846 3540C										
<u>Duplicate (1103135-DUP1)</u>			Source: SB	24765-01	<u>Pr</u>	epared: 22-	Feb-11 An	ialyzed: 23-F	eb-11	
Aroclor-1248 [2C]	BRL		µg/kg dry	1060000		BRL				40
Aroclor-1254	44600000		µg/kg dry	1060000		46700000			5	40
Aroclor-1254 [2C]	43100000		µg/kg dry	1060000		46200000			7	40
Aroclor-1260	BRL		µg/kg dry	1060000		BRL				40
Araclor-1260 [2C]	BRL		µg/kg dry	1060000		BRL				40
Aroclor-1262	BRL		μg/kg dry	1060000		BRL				40
Arodor-1262 [2C]	BRL		µg/kg dry	1060000		BRL				40
Arodor-1268	BRL		µg/kg dry	1060000		BRL				40
Aroclor-1268 [2C]	BRL		µg/kg dry	1060000		BRL				40
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	0.00	S01	µg/kg dry		212			30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.00	S01	µg/kg dry		212			30-150		
Surrogate: Decachlorobiphenyl (Sr)	0.00	S01	µg/kg dry		212			30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	0.00	S01	μg/kg dry		212			30-150		

#### **Notes and Definitions**

The surrogate recovery for this sample is not available due to sample dilution required from high analyte concentration

and/or matrix interference's.

BRL Below Reporting Limit - Analyte NOT DETECTED at or above the reporting limit

dry Sample results reported on a dry weight basis

NR Not Reported

RPD Relative Percent Difference

A plus sign (+) in the Method Reference column indicates the method is not accredited by NELAC.

<u>Laboratory Control Sample (LCS)</u>: A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

<u>Matrix Spike</u>: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

<u>Surrogate</u>: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Continuing Calibration Verification: The calibration relationship established during the initial calibration must be verified at periodic intervals. Concentrations, intervals, and criteria are method specific.

Validated by: Kimberly Wisk

# Reasonable Confidence Protocols Laboratory Analysis QA/QC Certification Form

Laboratory Name: Spectrum Analytical, Inc.

Client: TRC - Windsor, CT

Project Location: HSBC - Hartford, CT

**Project Number:** 181125.1000.000

Sampling Date(s):

Laboratory Sample ID(s):

2/17/2011

SB24765-01

#### **RCP Methods Used:**

SW846 8082A

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence Protocol documents?	<b>√</b> Yes	No
1A	Were the method specified preservation and holding time requirements met?	✓ Yes	No
1B	VPH and EPH methods only: Was the VPH or EPH method conducted without significant modifications (see Section 11.3 of respective RCP methods)?	Yes	No
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	✓ Yes	No
3	Were samples received at an appropriate temperature?	✓ Yes	No
4	Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved?	✓ Yes	No
5	a) Were reporting limits specified or referenced on the chain-of-custody? * b) Were these reporting limits met? *Exceptions are defined by qualifiers	Yes • Yes	/ No No
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	✓ Yes	No
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	✓ Yes	No

Note: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet the requirements for "Reasonable Confidence."

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for obtaining the information contained in this analytical report, such information is accurate and complete.

> Nicole Leja Laboratory Director

Date: 2/23/2011

to CT DAS Rades for Horthand Schall Bilding Committee &

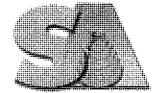
din Committee	Edition: September 2007 Supersede Previous Edition		IND TIME Stay		BS	Der Caulk					
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		WINDSOR, CONNI TELEPHONE (260) FAX (860) 298-6380	PROJECT NUMBER 18/125 1000	MSFECTO	FIRLD SAMPLE NUMBER	1 /0					
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☐ Final Report

☐ Re-Issued Report☐ Revised Report

Report Date: 24-Mar-11 15:07



SPECTRUM ANALYTICAL, INC.

Featuring
HANIBAL TECHNOLOGY

Laboratory Report

TRC

21 Griffin Road North Windsor, CT 06095 Attn: Jen Peshka

Project: Quirk Middle School - Hartford, CT

Project #: 181125.1000.0000

Laboratory ID	Client Sample ID	<u>Matrix</u>	Date Sampled	Date Received
SB25771-01	12	Light Gray Caulk	15-Mar-11 09:50	17-Mar-11 15:25
SB25771-02	13	Dark Gray Caulk	15-Mar-11 09:53	17-Mar-11 15:25
SB25771-03	14	Red Caulk	15-Mar-11 10:05	17-Mar-11 15:25

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.

All applicable NELAC requirements have been met.

Massachusetts # M-MA138/MA1110 Connecticut # PH-0777 Florida # E87600/E87936 Maine # MA138 New Hampshire # 2538 New Jersey # MA011/MA012 New York # 11393/11840 Pennsylvania # 68-04426/68-02924 Rhode Island # 98 USDA # S-51435



Authorized by:

Nicole Leja Laboratory Director

Nicole Leja

Spectrum Analytical holds certification in the State of New York for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of New York does not offer certification for all analytes.

Please note that this report contains 8 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Spectrum Analytical, Inc.

Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Spectrum is currently accredited for the specific method or analyte indicated. Please refer to our "Quality" web page at www.spectrum-analytical.com for a full listing of our current certifications and fields of accreditation. States in which Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (NY-11840, FL-E87936 and NJ-MA012).

#### CASE NARRATIVE:

The sample temperature upon receipt by Spectrum Analytical courier was recorded as 10.3 degrees Celsius. The condition of these samples was further noted as refrigerated. The samples were transported on ice to the laboratory facility and the temperature was recorded at 3.5 degrees Celsius upon receipt at the laboratory. Please refer to the Chain of Custody for details specific to sample receipt times.

An infrared thermometer with a tolerance of +/- 2.0 degrees Celsius was used immediately upon receipt of the samples.

If a Matrix Spike (MS), Matrix Spike Duplicate (MSD) or Duplicate (DUP) was not requested on the Chain of Custody, method criteria may have been fulfilled with a source sample not of this Sample Delivery Group.

Required site-specific Matrix Spike/Matrix Spike Duplicate (MS/MSD) must be requested by the client and sufficient sample must be submitted for the additional analyses. Samples submitted with insufficient volume/weight will not be analyzed for site specific MS/MSD, however a batch MS/MSD may be analyzed from a non-site specific sample.

CTDEP has published a list of analytical methods which provides a series of recommended protocols for the acquisition, analysis and reporting of analytical data in support of decisions being made utilizing the Reasonable Confidence Protocol (RCP). "Reasonable Confidence" can be established only for those methods published by the CTDEP in the RCP guidelines. The compounds and/or elements reported were specifically requested by the client on the Chain of Custody and in some cases may not include the full analyte list as defined in the method. Regulatory limits may not be achieved if specific method and/or technique was not requested on the Chain of Custody.

The CTDEP RCP requests that "all non-detects and all results below the reporting limit are reported as ND (Not Detected at the Specified Reporting Limit)". All non-detects and all results below the reporting limit are reported as "BRL" (Below the Reporting Limit) in this report.

If no reporting limits were specified or referenced on the chain-of-custody the laboratory's practical quantitation limits were applied.

Tetrachloro-m-xylene is recommended as a surrogate by the CTDEP RCP for the following SW846 Methods 8081, 8082 and 8151. Spectrum Analytical, Inc. uses Tetrachloro-m-xylene as the Internal Standard for these methods and Dibromooctaflourobiphenyl as the surrogate.

There is no relevant protocol-specific QC and/or performance standards non-conformances to report.

Sample Identification	
12	

Client Project # 181125,1000,0000

<u>Matrix</u> Light Gray Caulk Collection Date/Time 15-Mar-11 09:50 Received 17-Mar-11

SB25771-	-01		181125.	1000.0000	L	ight Gray (	Caulk 15	-Mar-11 09	17-Mar-11			
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert
Semivolati	ile Organic Compounds by GC		•									
	nated Biphenyls by SW846 8082 by method SW846 3540C	-										
12674-11-2	Aroclor-1016	BRL		μg/kg dry	204	1	SW846 8082A	17-Mar-11	24-Mar-11	IMR	1104683	×
11104-28-2	Aroclor-1221	BRL		μg/kg dry	204	1	41	lf.	**	*	**	X
11141-16-5	Aroclor-1232	BRL		μg/kg dry	204	1	**	u	н	ır	*1	X
53469-21-9	Aroclor-1242	BRL		μg/kg dry	204	1	41	41	**	10	н	х
12672-29-6	Aroclor-1248	BRĻ		μg/kg dry	204	1	ri	**	n		н	х
11097-69-1	Aroclor-1254	4,030		µg/kg dry	204	1	н	n	19		н	x
11096-82-5	Aroclor-1260	BRL		µg/kg dry	204	1	н		**	"	"	х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	204	1	ы	41	10	31	и	x
11100-14-4	Aroclor-1268	BRL		μg/kg dιy	204	1	n	п	**		**	х
Surrogate r	recoveries:		T and a second									
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	96		3	0-150 %		14	**	**	н		
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	96		3	0-150 %		* 16	и	40	Ħ	#t	
2051-24-3	Decachlorobiphenyl (Sr)	62		30	0-150 %		IF	н	11	в	**	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	80		36	0-150 %		11	ø			=	
General Cl	hemistry Parameters											
	% Solids	96.8		%		1	SM2540 G Mod.	17-Mar-11	17-Mar-11	BD	1104687	

Client Project # 181125.1000.0000

<u>Matrix</u> Dark Gray Caulk Collection Date/Time 15-Mar-11 09:53 Received 17-Mar-11

SB25771-02			181125.1000.0000		Dark Gray Caulk 1			5-Mar-11 09:53		17-Mar-11		
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C	!										
12674-11-2	Aroclor-1016	BRL		µg/kg dry	190	1	SW846 8082A	17-Mar-11	24-Mar-11	IMR	1104683	Х
11104-28-2	Arocior-1221	BRL		µg/kg đry	190	1	. "	11	#	п	•	х
11141-16-5	Aroclor-1232	BRL		µg/kg dry	190	1	•	**	**	н	10	X
53469-21-9	Aroclor-1242	BRL		μg/kg dry	190	1	н	41	•		11	×
12672-29-6	Aroclor-1248	BRL		μg/kg dry	190	1		**	"	•	47	X
11097-69-1	Aroclor-1254	1,100		μg/kg dry	190	1	п	Ħ	**	11	Ħ	х
11096-82-5	Aroclor-1260	BRL		μg/kg dry	190	1	ч	**	•	+4		X
37324-23-5	Arodor-1262	BRL		µg/kg dry	190	1	н	н	et	11	41	×
11100-14-4	Aroclor-1268	BRL		µg/kg đry	190	1	11	Ħ	н	11	e	X
Surrogate r	ecoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	70		3	0-150 %		te	19	11	ŧı	н	,
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	63		3	0-150 <b>%</b>		ır	**	и	н	H	
2051-24-3	Decachlorobiphenyl (Sr)	74		3	0-150 %		я	ır	t#	н	и	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	64		3	0-150 %		41	14	11	•	11	
General Cl	hemistry Parameters											
	% Solids	98.5		%		1	SM2540 G Mod.	17-Mar-11	17-Mar-11	BD	1104687	

Sample Identification 14 SB25771-03		Client Project # 181125.1000.0000			<u>Matrix</u> <u>C</u> Red Caulk		ollection Date/Time 15-Mar-11 10:05		Received 17-Mar-11			
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	inated Biphenyls by SW846 8082 by method SW846 3540C				·							
12674-11-2	Aroclor-1016	BRL		µg/kg dry	198	1	SW846 8082A	17-Mar-11	24-Mar-11	IMR	1104683	х
11104-28-2	Aroclor-1221	BRL		μg/kg dry	198	1	4	10	10	4	n	х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	198	1	41	11	18	H	N	х
53469-21-9	Aroclor-1242	BRL		µg/kg dry	198	1	п	**	18		и	х
12672-29-6	Aroclor-1248	BRL.		μg/kg dry	198	1	н	11	10	н		х
11097-69-1	Aroclor-1254	1,030		μg/kg dry	198	1	н		#1	и	41	x
11096-82-5	Aroclor-1260	BRL		μg/kg dry	198	1	11	**			**	х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	198	1	n	*1	u	n	it	х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	198	1	łs	н	**		41	x
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	94			30-150 %		**	н	#	47		
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	109			30-150 %		и	'n	н	11		
2051-24-3	Decachlorobiphenyl (Sr)	72			30-150 %		н	п	н	11		
2051-24-3	Decachlorobiphenyl (Sr) [2C]	73			30-150 %		н	н		4	н	
General C	hemistry Parameters											

% Solids

95.8

SM2540 G Mod. 17-Mar-11 17-Mar-11 BD 1104687

### Semivolatile Organic Compounds by GC - Quality Control

nalyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limi
atch 1104683 - SW846 3540C										
Blank (1104683-BLK1)					Pre	epared: 17-	Mar-11 An	alyzed: 24-M	lar-11	
Arodor-1016	BRL		μg/kg wet	20.0			3030 7.1			
Aroclor-1016 [2C]	BRL		µg/kg wet	20.0						
Aroclor-1221	BRL		μg/kg wet	20.0						
Aroclor-1221 [2C]	BRL		μg/kg wet	20.0						
Aroclor-1232	BRL		μg/kg wet	20.0						
Arocior-1232 [2C]	BRL		μg/kg wet	20.0						
Aroclor-1242	BRL		μg/kg wet	20.0						
Aroclor-1242 [2C]	BRL		μg/kg wet	20.0						
Aroclor-1248	BRL		μg/kg wet	20,0			•			
Aroclor-1248 [2C]	BRL		μg/kg wet	20.0						
Aroclor-1254	BRL		μg/kg wet	20.0						
Aroclor-1254 [2C]	BRL		μg/kg wet	20.0						
Aroclor-1260	BRL		μg/kg wet	20.0						
Aroclor-1260 [2C]	BRL		μg/kg wet	20.0						
Arodor-1262	8RL		μg/kg wet	20,0						
Aroclor-1262 [2C]	<b>BRL</b>		μg/kg wet	20.0						
Aroclor-1268	BRL		μg/kg wet	20.0						
Arodor-1268 [2C]	8RL		μg/kg wet	20.0						
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	20.8		μg/kg wet		20,0		104	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	24.1		µg/kg wet		20.0		121	30-150		
Surrogate: Decachlorobiphenyl (Sr)	15.4		µg/kg wet		20.0		77	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	13.5		μg/kg wet		20.0		68	30-150		
LC\$ (1104683-BS1)					<u>Pre</u>	epared: 17-	Mar-11 An	alyzed: 24-N	lar-11	
Aroclor-1016	211		μg/kg wet	20.0	250		85	50-140		
Aroclor-1016 [2C]	232		μg/kg wet	20.0	250		93	50-140		
Aroclar-1260	157		μg/kg wet	20.0	250		63	50-140		
Arodor-1260 [2C]	175		μg/kg wet	20.0	250		70	50-140		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	21.2		µg/kg wet		20.0		106	30-150	·	
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	22.7		μg/kg wet		20.0		114	30-150		
Surrogate: Decachlorobiphenyl (Sr)	14,9		μg/kg wet		20.0		74	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	13.8		µg/kg wet		20.0		69	30-150		
LCS Dup (1104683-BSD1)					Pre	epared: 17-	Mar-11 An	alyzed: 24-M	<u>lar-11</u>	
Arodor-1016	213		µg/kg wet	20.0	250		85	50-140	0.9	30
Aroclor-1016 [2C]	234		μg/kg wet	20.0	250		93	50-140	0.6	30
Aroclor-1260	161		μg/kg wet	20.0	250		64	50-140	2	30
Arodor-1260 [2C]	183		µg/kg wet	20.0	250		73	50-140	4	30
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	20.6		μg/kg wet		20.0		103	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	22.1		µg/kg wet		20.0		111	30-150		
Surrogate: Decachlorobiphenyl (Sr)	14.3		μg/kg wet		20.0		72	30-150		
Surrogate: Decachiorobiphenyl (Sr) [2C]	15.4		μg/kg wet		20.0		77	30-150		

### **Notes and Definitions**

BRL Below Reporting Limit - Analyte NOT DETECTED at or above the reporting limit

dry Sample results reported on a dry weight basis

NR Not Reported

RPD Relative Percent Difference

A plus sign (+) in the Method Reference column indicates the method is not accredited by NELAC.

<u>Laboratory Control Sample (LCS)</u>: A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

<u>Matrix Spike</u>: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

<u>Surrogate</u>: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

<u>Continuing Calibration Verification:</u> The calibration relationship established during the initial calibration must be verified at periodic intervals. Concentrations, intervals, and criteria are method specific.

Validated by: Nicole Leja Rebecca Merz

# Reasonable Confidence Protocols Laboratory Analysis QA/QC Certification Form

Laboratory Name: Spectrum Analytical, Inc.

Client: TRC - Windsor, CT

Project Location: Quirk Middle School - Hartford, CT

Project Number: 181125,1000,0000

Sampling Date(s):

Laboratory Sample ID(s):

3/15/2011

SB25771-01 through SB25771-03

RCP Methods Used:

SW846 8082A

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence Protocol documents?	~	Yes		No	
1A	Were the method specified preservation and holding time requirements met?	~	Yes	•	No	
1B	VPH and EPH methods only: Was the VPH or EPH method conducted without significant modifications (see Section 11.3 of respective RCP methods)?		Yes		No	
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	1	Yes		No	
3	Were samples received at an appropriate temperature?		Yes	<b>√</b>	No	
4	Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved?	~	Yes		No	
5	a) Were reporting limits specified or referenced on the chain-of-custody? * b) Were these reporting limits met?  * Exceptions are defined by qualifiers		Yes Yes	•	No No	
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	~	Yes		No	
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?		Yes	✓	' No	

Note: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet the requirements for "Reasonable Confidence."

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for obtaining the information contained in this analytical report, such information is accurate and complete.

Nicole Leja

Laboratory Director

Date: 3/24/2011

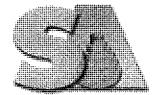
3Dey 147*	SB 2577 ( By	ND TIME 3day	Aour Sony Sony			10	7		· · · · · · · · · · · · · · · · · · ·		
*	LAB ID#	2	/ John J. 1		Roof Skylight	Roof Skylight	Roof Skylight				
	CUSTODY	PARAMETERS	(6)	2E) \$808 Ŷ3	X	$\mathbf{x}$	×				
	CHAIN OF CUSTODY	PROJECT NAME Quirk Middle School, Hartford, CT	(PRINTED) Jennifer Peshka & Hilton Hermandez	MATTERIAL	Light gray caulk	Dark gray caulk	Red caulk				
	06095	£ 3	(f)	COMP E	X 0:	X X	X				
RD NORTH	WINDSOR, CONNECTICUT 06095 TELEPHONE (860) 298-9692 FAX (860) 298-6399	JMBER 000	INSPECTOR: (SIGNATURE)	DATE	3/15/11 0950	3/15/11 0953	3/15/11 1005				
TRC 21 GRIFFIN RD NORTH	WINDSOR, CONNEC TELEPHONE (860) 29 FAX (860) 298-6399	PROJECT NUMB 181125.1000.0000	INSPECTOR	FIELD SAMPLE NUMBER	12	13	14				

1)atc: 3/16/1 Time: 0922	Received by: (Signature) Relinquished by: (Signature) Date: Received by: (Signature) S. 8	(Printed) (Printed) Trime: (Printed)		mit 1855 than 1.0 needed,
<u> </u>	Date: 3/16/11	Time:	0922	کا ا: ک

Final Report

□ Re-Issued Report□ Revised Report

Report Date: 10-Mar-11 11:02



SPECTRUM ANALYTICAL, INC.

Featuring

HANIBAL TECHNOLOGY

I aboratory Raport

Laboratory Report

Project: HSBC - Hartford, CT Project #: 181125.1000.000

TRC 21 Griffin Road North Windsor, CT 06095 Attn: Steve Arienti

Laboratory ID	Client Sample ID	<u>Matrix</u>	Date Sampled	Date Received
SB25194-01	1EJC	Substrate	01-Mar-11 10:20	03-Mar-11 15:25
SB25194-02	2EJC	Substrate	01-Mar-11 10:24	03-Mar-11 15:25
SB25194-03	3DC	Substrate	01-Mar-11 10:31	03-Mar-11 15:25
SB25194-04	4DC	Substrate	01-Mar-11 10:37	03-Mar-11 15:25
SB25194-05	5EPC	Substrate	01-Mar-11 11:08	03-Mar-11 15:25
SB25194-06	6EPC	Substrate	01-Mar-11 11:20	03-Mar-11 15:25
SB25194-07	7EJC	Substrate	01-Mar-11 11:35	03-Mar-11 15:25
SB25194-08	8EJC	Substrate	01-Mar-11 11:44	03-Mar-11 15:25
SB25194-09	9DC	Substrate	01-Mar-11 13:20	03-Mar-11 15:25
SB25194-10	10DC	Substrate	01-Mar-11 13:24	03-Mar-11 15:25
SB25194-11	11EPC	Substrate	01-Mar-11 13:41	03-Mar-11 15:25
SB25194-12	12EPC	Substrate	01-Mar-11 13:47	03-Mar-11 15:25

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.

All applicable NELAC requirements have been met.

Massachusetts # M-MA138/MA1110 Connecticut # PH-0777 Florida # E87600/E87936 Maine # MA138 New Hampshire # 2538 New Jersey # MA011/MA012 New York # 11393/11840 Pennsylvania # 68-04426/68-02924 Rhode Island # 98 USDA # S-51435



Authorized by:

Nicole Leja Laboratory Director

Micolo Leja

Spectrum Analytical holds certification in the State of New York for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of New York does not offer certification for all analytes.

Please note that this report contains 10 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Spectrum Analytical, Inc.

Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Spectrum is currently accredited for the specific method or analyte indicated. Please refer to our "Quality" web page at www.spectrum-analytical.com for a full listing of our current certifications and fields of accreditation. States in which Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (NY-11840, FL-E87936 and NJ-MA012).

# CASE NARRATIVE:

The sample temperature upon receipt by Spectrum Analytical courier was recorded as 5.8 degrees Celsius. The condition of these samples was further noted as refrigerated. The samples were transported on ice to the laboratory facility and the temperature was recorded at 5.1 degrees Celsius upon receipt at the laboratory. Please refer to the Chain of Custody for details specific to sample receipt times.

An infrared thermometer with a tolerance of +/- 2.0 degrees Celsius was used immediately upon receipt of the samples.

If a Matrix Spike (MS), Matrix Spike Duplicate (MSD) or Duplicate (DUP) was not requested on the Chain of Custody, method criteria may have been fulfilled with a source sample not of this Sample Delivery Group.

There is no relevant protocol-specific QC and/or performance standards non-conformances to report.

Sample Id	dentification		Clien	t Project #		<u>Matrix</u>	Colle	ction Date	/Time	Re	<u>ceived</u>	
SB25194	-01		18112	5.1000.000		Substrate	01-	-Mar-11 10	:20	03-1	Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolat	ile Organic Compounds by GC											
	inated Biphenyls by SW846 8082											
	by method SW846 3540C											
	Aroclor-1016	BRL		μg/kg dry	66.8	1	SW846 8082A	07-Mar-11	09-Mar-11	IMR	1103856	X
11104-28-2	Aroclor-1221	BRL		µg/kg dry	66.8	1	н	11	"	"	10	X
11141-18-5	Arodor-1232	BRL		µg/kg dry	66.8	1	n	12	и	**	11	X
53469-21-9	Aroclor-1242	BRL		µg/kg dry	66.8	1 .	н	n	n	ψ.	n	X
12672-29-6	Aroclor-1248	BRL		µg/kg dry	66.8	1	*1	н	el	н	. 14	X
11097-69-1	Aroclor-1254	BRL		µg/kg dry	66.8	1	я	Н	а	n	н	X
11096-82-5	Aroclor-1260	BRL		µg/kg dry	66.8	1	4	н	**	н	н	X
37324-23-5	Aroclor-1262	BRL		µg/kg dry	66.8	1	**	**	10	н	Ħ	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	66.8	1	11	#	11	*	н	X
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	86			30-150 %			**	u	4+	**	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	96			30-150 %		19	It	н	16	Ħ	
2051-24-3	Decachlorobiphenyl (Sr)	132			30-150 %		n	111	н	**	п	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	94			30-150 %		н		**	n	**	
General C	Chemistry Parameters											
	% Solids	99.6		%		1	SM2540 G Mod.	03-Mar-11	03-Mar-11	JLH	1103794	
					7-144 EUROPEAN							
	<u>lentification</u>		Clien	t Project#		Matrix	Colle	ection Date	/Time	Re	ceived	
2EJC				<u>t Project #</u> 5.1000.000	)	<u>Matrix</u> Substrate		ection Date		· · · · · · · · · · · · · · · · · · ·	ceived Mar-11	
				<u>t Project #</u> 5.1000.000		<u>Matrix</u> Substrate		ection Date -Mar-11 10		· · · · · · · · · · · · · · · · · · ·	<u>ceived</u> Mar-I1	
2EJC		Result			*RDL			-Mar-11 10		03-1	Mar-I1	Cert
2EJC SB25194 CAS No.	-02 Analyte(s)	Result	18112	5.1000.000	<del></del>	Substrate	01	-Mar-11 10	);24	03-1	Mar-I1	Cert
2EJC SB25194 CAS No. Semivolati	-02  Analyte(s) ile Organic Compounds by GC	Result	18112	5.1000.000	<del></del>	Substrate	01	-Mar-11 10	);24	03-1	Mar-I1	Cert
2EJC SB25194 CAS No. Semivolati Polychlori	-02 Analyte(s)	Result	18112	5.1000.000	<del></del>	Substrate	01	-Mar-11 10	);24	03-1	Mar-I1	Cert.
2EJC SB25194 CAS No. Semivolati Polychlori Prepared	-02  Analyte(s)  ile Organic Compounds by GC  inated Biphenyls by SW846 8082	<i>Result</i> BRL	18112	5.1000.000	<del></del>	Substrate	01	-Mar-11 10 Prepared	);24	03-l	Mar-I1	
2EJC SB25194 CAS No. Semivolati Polychlori Prepared	-02  Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C		18112	5.1000.000 Units	*RDL	Substrate  Dilution	01.  Method Ref.	-Mar-11 10 Prepared	Analyzed	03-l	Mar-I1	
2EJC SB25194 CAS No. Semivolate Polychlori Prepared 12674-11-2	-02  Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C  Aroclor-1016	BRL	18112	5.1000.000 <i>Units</i> μg/kg dry	*RDL	Substrate  Dilution	01.  Method Ref.	-Mar-11 10 Prepared	Analyzed	03-l	Mar-I1	×
2EJC SB25194- CAS No. Semivolati Polychlori Prepared 12674-11-2 11104-28-2	Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C  Aroclor-1016  Aroclor-1221	BRL BRL	18112	Units  Units  µg/kg dry µg/kg dry	*RDL 63.7 63.7	Dilution  1 1	Method Ref.  SW846 8082A	-Mar-11 10 Prepared	Analyzed	03-l	Mar-I 1  Batch  1103856	×
2EJC SB25194- CAS No. Semivolati Polychlori Prepared 12674-11-2 11104-28-2 11141-16-5	Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C  Aroclor-1016  Aroclor-1221  Aroclor-1232	BRL BRL BRL	18112	Units  Units  Hg/kg dry  Hg/kg dry  Hg/kg dry	*RDL 63.7 63.7 63.7	Dilution  1 1 1	Method Ref.  SW846 8082A	-Mar-11 10 Prepared	Analyzed	03-l	Mar-11  Batch  1103856	x x x
2EJC SB25194- CAS No. Semivolate Polychlori Prepared 12674-11-2 11104-28-2 11141-16-5 53469-21-9	-02  Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C  Aroctor-1016  Aroctor-1221  Aroctor-1232  Aroctor-1242	BRL BRL BRL BRL	18112	Units  Units  up/kg dry  up/kg dry  up/kg dry  up/kg dry  up/kg dry	*RDL 63.7 63.7 63.7 63.7	Dilution  1 1 1 1	Method Ref.  SW846 8082A	Prepared  07-Mar-11	Analyzed  09-Mar-11	O3-l	Mar-11  Batch  1103856	x x x
2EJC SB25194- CAS No. Semivolati Polychlori Prepared 12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-8	-02  Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C  Aroclor-1016  Aroclor-1221  Aroclor-1232  Aroclor-1242  Aroclor-1248	BRL BRL BRL BRL BRL	18112	Units  Hg/kg dry Hg/kg dry Hg/kg dry Hg/kg dry Hg/kg dry	*RDL 63.7 63.7 63.7 63.7 63.7	Dilution  1 1 1 1 1	Method Ref.  SW846 8082A	Prepared  07-Mar-11	Analyzed  09-Mar-11	O3-l	Mar-11  Batch  1103856	x x x x
2EJC SB25194- CAS No. Semivolati Polychlorid 12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1	Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C  Aroclor-1016  Aroclor-1221  Aroclor-1232  Aroclor-1242  Aroclor-1248  Aroclor-1254	BRL BRL BRL BRL BRL BRL	18112	Units  Hg/kg dry Hg/kg dry Hg/kg dry Hg/kg dry Hg/kg dry Hg/kg dry	*RDL  63.7 63.7 63.7 63.7 63.7 63.7	Dilution  1 1 1 1 1 1	Method Ref.  SW846 8082A	Prepared  07-Mar-11	2:24  Analyzed  09-Mar-11	O3-l	Mar-11  Batch  1103856	x x x x x x x x
2EJC SB25194- CAS No. Semivolate Polychlori Prepared 12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1 11096-82-5	Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C  Aroctor-1016  Aroctor-1221  Aroctor-1232  Aroctor-1242  Aroctor-1248  Aroctor-1254  Aroctor-1260  Aroctor-1262	BRL BRL BRL BRL BRL BRL	18112	Units  Hg/kg dry	*RDL  63.7 63.7 63.7 63.7 63.7 63.7 63.7	Dilution  1 1 1 1 1 1 1 1 1	Method Ref.  SW846 8082A  " " " " "	Prepared  07-Mar-11	O9-Mar-11	O3-l	Mar-11  Batch  1103856	x x x x x
2EJC SB25194- CAS No. Semivolati Polychlori Prepared 12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11096-82-5 37324-23-5 11100-14-4	Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C  Aroctor-1016  Aroctor-1221  Aroctor-1232  Aroctor-1242  Aroctor-1248  Aroctor-1254  Aroctor-1260  Aroctor-1262	BRL BRL BRL BRL BRL BRL BRL	18112	Units  Hg/kg dry	*RDL 63.7 63.7 63.7 63.7 63.7 63.7 63.7 63.7	Dilution  1 1 1 1 1 1 1 1 1 1	Method Ref.  SW846 8082A	Prepared  07-Mar-11	09-Mar-11	O3-l	Mar-11  Batch  1103856	x x x x x x x x x
2EJC SB25194- CAS No. Semivolati Polychlori Prepared 12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11096-82-5 37324-23-5 11100-14-4	Analyte(s)  ille Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C  Aroclor-1016  Aroclor-1221  Aroclor-1232  Aroclor-1242  Aroclor-1248  Aroclor-1254  Aroclor-1260  Aroclor-1262  Aroclor-1268	BRL BRL BRL BRL BRL BRL BRL	18112	Units  Hg/kg dry	*RDL 63.7 63.7 63.7 63.7 63.7 63.7 63.7 63.7	Dilution  1 1 1 1 1 1 1 1 1 1	Method Ref.  SW846 8082A	Prepared  07-Mar-11	09-Mar-11	O3-l	Mar-11  Batch  1103856	x x x x x x x x x
2EJC SB25194- CAS No. Semivolati Polychlori Prepared 12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1 11096-82-5 37324-23-5 11100-14-4 Surrogate	Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C  Aroclor-1016 Aroclor-1221 Aroclor-1232 Aroclor-1242 Aroclor-1248 Aroclor-1254 Aroclor-1260 Aroclor-1260 Aroclor-1268  recoveries: 4,4-DB-Octafluorobiphenyl (Sr) 4,4-DB-Octafluorobiphenyl (Sr)	BRL BRL BRL BRL BRL BRL BRL BRL	18112	Units  Hg/kg dry	*RDL  63.7 63.7 63.7 63.7 63.7 63.7 63.7 63.	Dilution  1 1 1 1 1 1 1 1 1 1	01  Method Ref.  SW846 8082A  " " " " " " " "	Prepared  07-Mar-11	09-Mar-11	O3-l	Mar-11  Batch  1103856	x x x x x x x x x
2EJC SB25194 CAS No. Semivolati Polychlori Prepared 12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1 11096-82-5 37324-23-5 11100-14-4 Surrogate 1 10386-84-2	Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C  Aroclor-1016  Aroclor-1221  Aroclor-1232  Aroclor-1242  Aroclor-1248  Aroclor-1254  Aroclor-1260  Aroclor-1262  Aroclor-1268	BRL BRL BRL BRL BRL BRL BRL	18112	Units  Hg/kg dry	*RDL  63.7 63.7 63.7 63.7 63.7 63.7 63.7 63.	Dilution  1 1 1 1 1 1 1 1 1 1	01-  Method Ref.  SW846 8082A  """  """  """  """  """  """  """	Prepared  07-Mar-11	09-Mar-11	Analyst  IMR  """  """  """  """	Mar-11  Batch  1103856	x x x x x x x x x
2EJC SB25194. CAS No. Semivolati Polychlori Prepared 12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1 11096-82-5 37324-23-5 11100-14-4 Surrogate 1 10386-84-2 10386-84-2	Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C  Aroclor-1016  Aroclor-1221  Aroclor-1232  Aroclor-1242  Aroclor-1254  Aroclor-1254  Aroclor-1260  Aroclor-1262  Aroclor-1268  recoveries:  4,4-DB-Octafluorobiphenyl (Sr) 4,4-DB-Octafluorobiphenyl (Sr) [2C]  Decachlorobiphenyl (Sr)	BRL BRL BRL BRL BRL BRL BRL	18112	Units  Hg/kg dry	*RDL  63.7 63.7 63.7 63.7 63.7 63.7 63.7 63.	Dilution  1 1 1 1 1 1 1 1 1 1	01-  Method Ref.  SW846 8082A  """  """  """  """  """  """  """	Prepared  O7-Mar-11  " " " " " "	09-Mar-11	Analyst  IMR  """  """  """  """	Mar-11  Batch  1103856	x x x x x x x x x
2EJC SB25194- CAS No. Semivolati Polychlori Prepared 12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1 11096-82-5 37324-23-5 11100-14-4 Surrogate 10386-84-2 10386-84-2 2051-24-3	Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C  Aroclor-1016  Aroclor-1221  Aroclor-1232  Aroclor-1242  Aroclor-1254  Aroclor-1254  Aroclor-1260  Aroclor-1262  Aroclor-1268  recoveries:  4,4-DB-Octafluorobiphenyl (Sr) {2C}	BRL BRL BRL BRL BRL BRL BRL BRL BRL	18112	Units  Hg/kg dry	*RDL  63.7 63.7 63.7 63.7 63.7 63.7 63.7 63.	Dilution  1 1 1 1 1 1 1 1 1 1	01-  Method Ref.  SW846 8082A  " " " " " " " " " "	Prepared  O7-Mar-11  " " " " " "	09-Mar-11	O3-J	Mar-11  Batch  1103856	x x x x x x x x x

3DC	dentification			t Project # 5.1000.000	)	<u>Matrix</u> Substrate		ection Date			ceived Mar-11	
SB25194												
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Polychlori	ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		µg/kg dry	66.6	1	SW846 8082A	07-Mar-11	09-Mar-11	IMR	1103856	х
11104-28-2	Aroclar-1221	BRL		µg/kg dry	66.6	1	"	41	м	н	п	Х
11141-16-5	Aroclor-1232	BRL		µg/kg dry	66.6	1	N	4	**	н	n	Х
53469-21-9	Aroclor-1242	BRL		µg/kg dry	66.6	1	и	•	п	н	"	Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	66.6	1	н	vt	u	п	n	Х
11097-69-1	Aroclor-1254	BRL		µg/kg dry	66.6	1	N	17	4	н		Х
11096-82-5	Aroclor-1260	BRL		µg/kg dry	66.6	1	'n	**	41	•	*1	Х
37324-23-5	Aroclor-1262	BRL		µg/kg dry	66,6	1	и	17	n	ŧr	Ħ	Х
11100-14-4	Aroclor-1268	BRL		µg/kg dry	66.6	1	"	**	r	*	**	Х
Surrogate i	recoveries:						***************************************					
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	86			30-150 %				н	**	**	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	82			30-150 %		N	u	n	**	u	
2051-24-3	Decachlorobiphenyi (Sr)	107			30-150 %		"	н		14	••	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	82			30-150 %		**	н	n	10	44	
General C	hemistry Parameters											
	% Solids	100		%		1	SM2540 G Mod.	03-Mar-11	03-Mar-11	JLH	1103794	
Sample Id	lantification											
4DC SB25194-				t Project # 5.1000.000	)	<u>Matrix</u> Substrate		ection Date -Mar-11 10			ceived Mar-11	
4DC		Result			*RDL			-Mar-1110		03-1	Mar-11	Cert.
ADC SB25194- CAS No. Semivolati Polychlori Prepared	Analyte(s) ile Organic Compounds by GC nated Biphenyls by SW846 8082 by method SW846 3540C		18112	5.1000.000 Units	*RDL	Substrate  Dilution	Method Ref.	-Mar-11 10	):37  Analyzed	03-l	Mar-11  Batch	
ADC SB25194- CAS No. Semivolati Polychlori Prepared 12674-11-2	Analyte(s)  ile Organic Compounds by GC nated Biphenyls by SW846 8082 by method SW846 3540C Arodor-1016	BRL	18112	. 1000.000 Units µg/kg dry	* <i>RDL</i>	Substrate  Dilution	· 01	-Mar-11 10	):37	03-l	Mar-11	×
ADC SB25194- CAS No. Semivolati Polychlori Prepared 12674-11-2 11104-28-2	Analyte(s)  ile Organic Compounds by GC nated Biphenyls by SW846 8082 by method SW846 3540C Aroctor-1016 Aroctor-1221	BRL BRL	18112	Units  Units  Pg/kg dry  Pg/kg dry	*RDL 59.0 59.0	Substrate  Dilution	Method Ref.	-Mar-11 10	):37  Analyzed	03-l	Mar-11  Batch	×
4DC SB25194- CAS No. Semivolati Polychlori Prepared 12674-11-2 11104-28-2 11141-16-5	Analyte(s)  ile Organic Compounds by GC nated Biphenvis by SW846 8082 by method SW846 3540C Aroctor-1016 Aroctor-1221 Aroctor-1232	BRL BRL BRL	18112	Units  Hg/kg dry Hg/kg dry	*RDL  59.0 59.0 59.0	Dilution  1 1 1	Method Ref.  SW846 8082A	-Mar-11 10	):37  Analyzed	03-l	Mar-11  Batch	× × ×
4DC SB25194- CAS No. Semivolati Polychlori Prepared 12674-11-2 11104-28-2 11141-16-5 53469-21-9	Analyte(s)  ile Organic Compounds by GC nated Biphenyls by SW846 8082 by method SW846 3540C Arodor-1016 Aroclor-1221 Aroclor-1232 Aroclor-1242	BRL BRL BRL BRL	18112	Units  Hg/kg dry Hg/kg dry Hg/kg dry Hg/kg dry	*RDL  59.0 59.0 59.0 59.0	Dilution  1 1 1 1	Method Ref.  SW846 8082A	-Mar-11 10	09-Mar-11	03-I	Mar-11  Batch  1103856	× × ×
4DC SB25194- CAS No. Semivolati Polychlori Prepared 12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6	Analyte(s)  ile Organic Compounds by GC nated Biphenyls by SW846 8082 by method SW846 3540C  Aroctor-1016  Aroctor-1221  Aroctor-1232  Aroctor-1242  Aroctor-1248	BRL BRL BRL BRL BRL	18112	Units  Pg/kg dry Pg/kg dry Pg/kg dry Pg/kg dry Pg/kg dry	*RDL  59.0 59.0 59.0 59.0 59.0	Substrate  Dilution  1 1 1 1	Method Ref.  SW846 8082A	-Mar-11 10  Prepared  07-Mar-11  " " "	):37  Analyzed	O3-I	Mar-11  Batch	x x x x
4DC SB25194- CAS No. Semivolati Polychlori Prepared 12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1	Analyte(s)  ile Organic Compounds by GC nated Biphenyls by SW846 8082 by method SW846 3540C  Aroctor-1016 Aroctor-1221 Aroctor-1232 Aroctor-1242 Aroctor-1248 Aroctor-1254	BRL BRL BRL BRL BRL	18112	Units  Hg/kg dry Hg/kg dry Hg/kg dry Hg/kg dry Hg/kg dry Hg/kg dry	*RDL  59.0 59.0 59.0 59.0 59.0 59.0	Dilution  1 1 1 1 1 1	Method Ref.  SW846 8082A	-Mar-11 10  Prepared  07-Mar-11  """  """	09-Mar-11	O3-I	Mar-11  Batch  1103856	x x x x
4DC SB25194- CAS No. Semivolati Polychlori Prepared 12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1 11096-82-5	Analyte(s)  ile Organic Compounds by GC nated Biphenvis by SW846 8082 by method SW846 3540C Aroclor-1016 Aroclor-1221 Aroclor-1232 Aroclor-1242 Aroclor-1248 Aroclor-1254 Aroclor-1260	BRL BRL BRL BRL BRL BRL	18112	Units  Hg/kg dry	*RDL  59.0 59.0 59.0 59.0 59.0 59.0 59.0	Dilution  1 1 1 1 1 1 1 1	Method Ref.  SW846 8082A	-Mar-11 10  Prepared  07-Mar-11  """  """  """	09-Mar-11	O3-I	Mar-11  Batch  1103856	x x x x x
4DC SB25194- CAS No. Semivolati Polychlori Prepared 12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1 11096-82-5 37324-23-5	Analyte(s)  ile Organic Compounds by GC nated Biphenyls by SW846 8082 by method SW846 3540C Aroctor-1016 Aroctor-1221 Aroctor-1232 Aroctor-1242 Aroctor-1248 Aroctor-1254 Aroctor-1260 Aroctor-1262	BRL BRL BRL BRL BRL BRL	18112	Units  Hg/kg dry	*RDL  59.0 59.0 59.0 59.0 59.0 59.0 59.0 59.	Dilution	Method Ref.  SW846 8082A	-Mar-11 10  Prepared  07-Mar-11  """  """  """  """  """	09-Mar-11	O3-I	Mar-11  Batch  1103856	× × × × × ×
4DC SB25194- CAS No. Semivolati Polychlori Prepared 12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1 11096-82-5 37324-23-5 11100-14-4	Analyte(s)  ile Organic Compounds by GC nated Biphenyls by SW846 8082 by method SW846 3540C  Aroctor-1016 Aroctor-1221 Aroctor-1222 Aroctor-1242 Aroctor-1248 Aroctor-1254 Aroctor-1260 Aroctor-1262 Aroctor-1268	BRL BRL BRL BRL BRL BRL	18112	Units  Hg/kg dry	*RDL  59.0 59.0 59.0 59.0 59.0 59.0 59.0	Dilution  1 1 1 1 1 1 1 1	Method Ref.  SW846 8082A	-Mar-11 10  Prepared  07-Mar-11  """  """  """	09-Mar-11	O3-I	Mar-11  Batch  1103856	x x x x x
4DC SB25194- CAS No. Semivolati Polychlori Prepared 12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1 11096-82-5 37324-23-5 11100-14-4 Surrogate in	Analyte(s)  ile Organic Compounds by GC nated Biphenyls by SW846 8082 by method SW846 3540C  Aroctor-1016 Aroctor-1221 Aroctor-1222 Aroctor-1242 Aroctor-1248 Aroctor-1254 Aroctor-1260 Aroctor-1262 Aroctor-1268	BRL BRL BRL BRL BRL BRL BRL	18112	Units  Hg/kg dry	*RDL  59.0 59.0 59.0 59.0 59.0 59.0 59.0 59.	Dilution	Method Ref.  SW846 8082A	-Mar-11 10  Prepared  07-Mar-11  """  """  """  """  """	09-Mar-11	O3-I	Mar-11  Batch  1103856	× × × × × ×
4DC SB25194- CAS No. Semivolati Polychlori Prepared 12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1 11096-82-5 37324-23-5 11100-14-4 Surrogate in 10386-84-2	Analyte(s)  ile Organic Compounds by GC nated Biphenyls by SW846 8082 by method SW846 3540C  Arodor-1016  Aroclor-1221  Aroclor-1232  Aroclor-1242  Aroclor-1248  Aroclor-1254  Aroclor-1260  Aroclor-1262  Aroclor-1268  recoveries:  4,4-DB-Octafluorobiphenyl (Sr)	BRL BRL BRL BRL BRL BRL BRL	18112	Units  Hg/kg dry	*RDL  59.0 59.0 59.0 59.0 59.0 59.0 59.0 59.	Dilution	Method Ref.  SW846 8082A	-Mar-11 10  Prepared  07-Mar-11  """  """  """  """  """	09-Mar-11	O3-I	Mar-11  Batch  1103856	× × × × × ×
4DC SB25194- CAS No. Semivolati Polychlori Prepared 12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1 11096-82-5 37324-23-5 11100-14-4 Surrogate n 10386-84-2	Analyte(s)  ile Organic Compounds by GC nated Biphenyls by SW846 8082 by method SW846 3540C  Arodor-1016  Aroclor-1221  Aroclor-1232  Aroclor-1242  Aroclor-1248  Aroclor-1254  Aroclor-1260  Aroclor-1262  Aroclor-1268  recoveries:  4,4-DB-Octafluorobiphenyl (Sr) 4,4-DB-Octafluorobiphenyl (Sr) [2C]	BRL BRL BRL BRL BRL BRL BRL BRL	18112	Units  Hg/kg dry	*RDL  59.0 59.0 59.0 59.0 59.0 59.0 59.0 30-150 %	Substrate   Dilution	Method Ref.  SW846 8082A	-Mar-11 10  Prepared  07-Mar-11  """  """  """  """  """	09-Mar-11	O3-I	Mar-11  Batch  1103856	× × × × × ×
4DC SB25194- CAS No. Semivolati Polychlori Prepared 12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1 11096-82-5 37324-23-5 11100-14-4 Surrogate r 10386-84-2 10386-84-2	Analyte(s)  ile Organic Compounds by GC nated Biphenyls by SW846 8082 by method SW846 3540C  Aroctor-1016  Aroctor-1221  Aroctor-1242  Aroctor-1248  Aroctor-1254  Aroctor-1260  Aroctor-1262  Aroctor-1268  recoveries:  4,4-DB-Octafluorobiphenyl (Sr) 4,4-DB-Octafluorobiphenyl (Sr) [2C]  Decachlorobiphenyl (Sr)	BRL BRL BRL BRL BRL BRL BRL BRL BRL	18112	Units  Hg/kg dry	*RDL  59.0 59.0 59.0 59.0 59.0 59.0 59.0 30-150 % 30-150 %	Substrate   Dilution	Method Ref.  SW846 8082A	-Mar-11 10  Prepared  07-Mar-11  """  """  """  """  """	09-Mar-11	O3-I	Mar-11  Batch  1103856	× × × × × ×
4DC SB25194- CAS No. Semivolati Polychlori Prepared 12674-11-2 11104-28-2 11141-16-5 53459-21-9 12672-29-6 11097-69-1 11096-82-5 37324-23-5 11100-14-4 Surrogate n 10386-84-2 10386-84-2 2051-24-3 2051-24-3	Analyte(s)  ile Organic Compounds by GC nated Biphenyls by SW846 8082 by method SW846 3540C  Arodor-1016  Aroclor-1221  Aroclor-1232  Aroclor-1242  Aroclor-1248  Aroclor-1254  Aroclor-1260  Aroclor-1262  Aroclor-1268  recoveries:  4,4-DB-Octafluorobiphenyl (Sr) 4,4-DB-Octafluorobiphenyl (Sr) [2C]	BRL BRL BRL BRL BRL BRL BRL BRL	18112	Units  Hg/kg dry	*RDL  59.0 59.0 59.0 59.0 59.0 59.0 59.0 30-150 %	Substrate   Dilution	Method Ref.  SW846 8082A	-Mar-11 10  Prepared  07-Mar-11  """  """  """  """  """	09-Mar-11	O3-I	Mar-11  Batch  1103856	× × × × × ×

Sample Id	<u>dentification</u>			t Project#		Matrix		ction Date			ceived	
SB25194	-05		18112	5.1000.000	ı	Substrate	: 01-	-Mar-11 11	:08	03-1	√far-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Ceri.
Semivolat	ile Organic Compounds by GC											
	inated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	64.5	1	SW846 8082A	07-Mar-11	09-Mar-11	IMR	1103856	Х
11104-28-2	Aroclor-1221	BRL		µg/kg dry	64.5	1	**	tr	11			х
11141-16-5	Aroclor-1232	BRL		µg/kg dry	64.5	1	q	38	tl.	#	н	X
53469-21-9	Aroclor-1242	BRL		µg/kg dry	64.5	1		"			**	X
12672-29-6	Aroclor-1248	BRL		μg/kg dry	64.5	1	r	и	19	17	н	X
11097-69-1	Aroclor-1254	BRL		μg/kg dry	64.5	1	If	ti	•	н	n	X
1109 <del>6</del> -82-5	Aroclor-1260	BRL		µg/kg dry	64.5	1	I4	"	*	n	**	Х
37324-23-5	Aroclor-1262	BRL		µg/kg dry	64.5	1	IF	н	н	h	m	Х
11100-14-4	Aroclor-1268	BRL		µg/kg dry	64.5	1	II	"	а	n	**	X
Surrogate	recoveries:								····	~L-		
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	72			30-150 %		н	*1	11	**	**	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	80			30-150 %		н	ti	11	*	**	
2051-24-3	Decachlorobiphenyl (Sr)	99			30-150 %		n	41		•	•	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	94			30-150 %		н	41	10	**		
General C	hemistry Parameters											
	% Solids	96.0		<b>%</b> .		1	SM2540 G Mod.	03-Mar-11	03-Mar-11	JLH	1103794	
		96.0		% <u>.</u>		1	SM2540 G Mod.		03-Mar-11			
Sample Id		96.0	Clien									
Sample Io	dentification	96.0		% . <u>t Project #</u> 5.1000.000	<i>(2005-100-2001)</i>	t <u>Matrix</u> Substrate	Colle	ection Date	/Time	Red	ceived	
Sample Id	dentification	96.0		t Project #		<u>Matrix</u>	Colle		/Time	Red		
Sample Io	dentification	96.0 Resuit		t Project #	*RDL	<u>Matrix</u>	Colle	ection Date	/Time	<u>Rec</u> 03-I	ceived Mar-11	
Sample Io 6EPC SB25194 CAS Na.	dentification		18112	<u>t Project #</u> 5.1000.000	<del>.</del>	<u>Matrix</u> Substrate	<u>Colle</u> : 01	ection Date	/Time	<u>Rec</u> 03-I	ceived Mar-11	
Sample Io 6EPC SB25194 CAS Na. Semivolat	dentification -06 Analyte(s)		18112	<u>t Project #</u> 5.1000.000	<del>.</del>	<u>Matrix</u> Substrate	<u>Colle</u> : 01	ection Date	/Time	<u>Rec</u> 03-I	ceived Mar-11	
Sample Id 6EPC SB25194 CAS Na. Semivolat Polychlori	dentification  -06  Analyte(s)  ile Organic Compounds by GC		18112	<u>t Project #</u> 5.1000.000	<del>.</del>	<u>Matrix</u> Substrate	<u>Colle</u> : 01	ection Date	/Time	<u>Rec</u> 03-I	ceived Mar-11	
Sample Id 6EPC SB25194 CAS No. Semivolat Polychlori Prepared	dentification  -06  Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082		18112	<u>t Project #</u> 5.1000.000	<del>.</del>	<u>Matrix</u> Substrate	<u>Colle</u> : 01	ection Date -Mar-11 11 Prepared	/Time	Rec 03-1 Analyst	ceived Mar-11	Cerl.
Sample Id 6EPC SB25194 CAS No. Semivolat Polychlori Prepared	dentification  -06  Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C	Result	18112	t Project # 5.1000.000 <i>Units</i>	*RDL	Matrix Substrate	Colle 01 Method Ref.	ection Date -Mar-11 11 Prepared	/Time ::20 Analyzed	Rec 03-1 Analyst	ceived Mar-11 Batch	Cerl.
Sample Id 6EPC SB25194 CAS Na Semivolat Polychlori Prepared 12674-11-2	dentification  -06  Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C  Aroclor-1016	<i>Result</i>	18112	t Project # 5.1000.000 Units	*RDL	Matrix Substrate	Colle 01 Method Ref.	ection Date -Mar-11 11 Prepared	/Time ::20 Analyzed	Rec 03-1 Analyst	ceived Mar-11 Batch	Cert.
Sample Id 6EPC SB25194 CAS No. Semivolat Polychlori Prepared 12674-11-2 11104-28-2	dentification  -06  Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C  Aroclor-1016 Aroclor-1221	Result  BRL  BRL	18112	t Project # 5.1000.000  Units  µg/kg dry µg/kg dry	*RDL 65.2 65.2	Matrix Substrate  Dilution	Colle 01 Method Ref.	ection Date -Mar-11 11 Prepared	/Time ::20 Analyzed	Rec 03-1 Analyst	ceived Mar-11 Batch	Cert.
Sample Id 6EPC SB25194 CAS No. Semivolat Polychlori Prepared 12674-11-2 11104-28-2 11141-16-5	dentification  -06  Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C  Aroclor-1016  Aroclor-1221  Aroclor-1232	Result  BRL BRL BRL	18112	t Project # 5.1000.000  Units  µg/kg dry µg/kg dry µg/kg dry	*RDL  65.2 65.2 65.2	Matrix Substrate  Dilution	Colle Colle Method Ref.  SW846 8082A	ection Date -Mar-11 11  Prepared  07-Mar-11 "	/Time 1:20 Analyzed 09-Mar-11	Rec 03-l Analyst	ceived Mar-11 Batch	Cert.
Sample Id 6EPC SB25194 CAS Na Semivolat Polychlori Prepared 12674-11-2 11104-28-2 11141-16-5 53469-21-9	dentification  -06  Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C  Aroclor-1016  Aroclor-1221  Aroclor-1232  Aroclor-1242	Result  BRL  BRL  BRL  BRL	18112	t Project # 5.1000.000  Units  ug/kg dry  ug/kg dry  ug/kg dry  ug/kg dry	*RDL 65.2 65.2 65.2 65.2	Matrix Substrate  Dilution	Colle 01  Method Ref.  SW846 8082A	ection Date -Mar-11 11 Prepared  07-Mar-11	/Time 1:20 Analyzed 09-Mar-11	Rec 03-1  Analyst  IMR  "	ceived Mar-11 Batch	Cert.
Sample Id 6EPC SB25194 CAS Na Semivolat Polychlori Prepared 12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6	dentification  -06  Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C  Aroclor-1016 Aroclor-1221 Aroclor-1232 Aroclor-1242 Aroclor-1248	Result  BRL  BRL  BRL  BRL  BRL	18112	t Project # 5.1000.000  Units  µg/kg dry µg/kg dry µg/kg dry µg/kg dry µg/kg dry	*RDL  65.2 65.2 65.2 65.2 65.2	Matrix Substrate  Dilution	Colle 01  Method Ref.  SW846 8082A	ection Date -Mar-11 11 Prepared  07-Mar-11	/Time 1:20 Analyzed 09-Mar-11	Rec 03-1 Analyst	ceived Mar-11 Batch	Cert.  X X X X
Sample Id 6EPC SB25194 CAS No. Semivolat Polychlori Prepared 12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1	dentification  -06  Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C  Aroclor-1016  Aroclor-1221  Aroclor-1232  Aroclor-1242  Aroclor-1248  Aroclor-1254	Result  BRL BRL BRL BRL BRL 219	18112	t Project # 5.1000.000  Units  ug/kg dry  ug/kg dry  ug/kg dry  ug/kg dry  ug/kg dry  ug/kg dry	*RDL  65.2 65.2 65.2 65.2 65.2 65.2	Matrix Substrate  Dilution	Colle 01  Method Ref.  SW846 8082A	ection Date -Mar-11 11 Prepared  07-Mar-11 " " "	/Time  :20   Analyzed   09-Mar-11	Rec 03-1  Analyst  IMR  " " "	ceived Mar-11 Batch	Cert.  X X X X X
Sample Id 6EPC SB25194  CAS No. Semivolat Polychlori Prepared 12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11096-82-5	dentification  -06  Analyte(s)  ille Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C  Aroclor-1016  Aroclor-1221  Aroclor-1232  Aroclor-1242  Aroclor-1248  Aroclor-1254  Aroclor-1260	Result  BRL BRL BRL BRL 219 74.0	18112	t Project # 5.1000.000  Units  ug/kg dry	*RDL  65.2 65.2 65.2 65.2 65.2 65.2 65.2	Matrix Substrate  Dilution	Colle 01  Method Ref.  SW846 8082A	ection Date -Mar-11 11  Prepared  07-Mar-11  """  """  """	/Time  :20   Analyzed   09-Mar-11   "   "   "   "   "   "   "   "   "   "	Rec 03-I	ceived Mar-11 Batch	X X X X X X X X
Sample Id 6EPC SB25194  CAS No. Semivolat Polychlori Prepared 12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11096-82-5 37324-23-5 11100-14-4	dentification  -06  Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C  Aroclor-1016  Aroclor-1221  Aroclor-1222  Aroclor-1242  Aroclor-1248  Aroclor-1254  Aroclor-1260  Aroclor-1262	Result  BRL  BRL  BRL  BRL  219  74.0  BRL	18112	t Project # 5.1000.000  Units   µg/kg dry   *RDL  65.2 65.2 65.2 65.2 65.2 65.2 65.2 65.	Matrix Substrate  Dilution	Colle 01  Method Ref.  SW846 8082A	ection Date -Mar-11 11  Prepared  07-Mar-11  """  """  """  ""  """	/Time :20 Analyzed	Rec 03-1  Analyst  IMR  """  """  """  """	ceived Mar-11 Batch	Cert.  X X X X X X	
Sample Id 6EPC SB25194  CAS No. Semivolat Polychlori Prepared 12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11096-82-5 37324-23-5 11100-14-4 Surrogate	dentification  -06  Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C  Aroclor-1016  Aroclor-1221  Aroclor-1232  Aroclor-1242  Aroclor-1248  Aroclor-1254  Aroclor-1260  Aroclor-1262  Aroclor-1268	Result  BRL  BRL  BRL  BRL  219  74.0  BRL	18112	t Project # 5.1000.000  Units   µg/kg dry   *RDL  65.2 65.2 65.2 65.2 65.2 65.2 65.2 65.	Matrix Substrate  Dilution	Colle 01  Method Ref.  SW846 8082A	ection Date -Mar-11 11  Prepared  07-Mar-11  """  """  """  ""  """	/Time :20 Analyzed	Rec 03-1  Analyst  IMR  """  """  """  """	ceived Mar-11 Batch	Cert.  X X X X X X	
Sample Id 6EPC SB25194  CAS No.  Semivolat Polychlori Prepared 12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11096-82-5 37324-23-5 11100-14-4 Surrogate	dentification  -06  Analyte(s)  ille Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C  Aroclor-1016  Aroclor-1221  Aroclor-1232  Aroclor-1242  Aroclor-1248  Aroclor-1254  Aroclor-1260  Aroclor-1262  Aroclor-1268  recoveries:	Result  BRL  BRL  BRL  219  74.0  BRL  BRL  BRL	18112	t Project # 5.1000.000  Units   µg/kg dry   *RDL  65.2 65.2 65.2 65.2 65.2 65.2 65.2 65.	Matrix Substrate  Dilution	Colle 01:  Method Ref.  SW846 8082A	ection Date -Mar-11 11  Prepared  07-Mar-11  """  """  """  ""  """	/Time :20 Analyzed	Rec 03-I	ceived Mar-11 Batch	Cert.  X X X X X X	
Sample Id 6EPC SB25194  CAS Na Semivolat Polychlori Prepared 12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1 11096-82-5 37324-23-5 11100-14-4 Surrogate 1 10386-84-2	dentification  -06  Analyte(s)  ille Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C  Aroclor-1016  Aroclor-1221  Aroclor-1232  Aroclor-1242  Aroclor-1248  Aroclor-1254  Aroclor-1260  Aroclor-1262  Aroclor-1268  recoveries:  4,4-DB-Octafluorobiphenyl (Sr)  4,4-DB-Octafluorobiphenyl (Sr)	Result  BRL  BRL  BRL  219  74.0  BRL  BRL	18112	t Project # 5.1000.000  Units   µg/kg dry	*RDL 65.2 65.2 65.2 65.2 65.2 65.2 65.2 65.2	Matrix Substrate  Dilution	Colle 01- Method Ref.  SW846 8082A	ection Date -Mar-11 11  Prepared  07-Mar-11  """  """  """  ""  """	/Time :20 Analyzed	Rec 03-l	ceived Mar-11 Batch	Cert.  X X X X X X
Sample Id 6EPC SB25194  CAS Na Semivolat Polychlori Prepared 12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1 11096-82-5 37324-23-5 11100-14-4 Surrogate 10386-84-2 10386-84-2	dentification  -06  Analyte(s)  ille Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C  Aroclor-1016  Aroclor-1221  Aroclor-1232  Aroclor-1242  Aroclor-1248  Aroclor-1254  Aroclor-1260  Aroclor-1262  Aroclor-1268  recoveries:  4,4-DB-Octafluorobiphenyl (Sr) [2C]	Result  BRL BRL BRL 219 74.0 BRL BRL BRL	18112	t Project # 5.1000.000  Units   µg/kg dry	*RDL 65.2 65.2 65.2 65.2 65.2 65.2 65.2 65.2	Matrix Substrate  Dilution	Colle 01- Method Ref.  SW846 8082A	or-Mar-11 11  Prepared  07-Mar-11  " " " " " " "	/Time :20 Analyzed	Rec 03-l	ceived Mar-11 Batch	Cert.  X X X X X X
Sample Id 6EPC SB25194  CAS No. Semivolat Polychlori Prepared 12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1 11096-82-5 37324-23-5 11100-14-4 Surrogate (10386-84-2) 10386-84-2 2051-24-3 2051-24-3	dentification  -06  Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C  Aroclor-1016  Aroclor-1221  Aroclor-1222  Aroclor-1242  Aroclor-1248  Aroclor-1254  Aroclor-1260  Aroclor-1260  Aroclor-1268  recoveries:  4,4-DB-Octafluorobiphenyl (Sr) 4,4-DB-Octafluorobiphenyl (Sr) [2C]  Decachlorobiphenyl (Sr)	Result  BRL  BRL  BRL  219  74.0  BRL  BRL  78  86	18112	t Project # 5.1000.000  Units   µg/kg dry	*RDL  65.2 65.2 65.2 65.2 65.2 65.2 65.2 65.	Matrix Substrate  Dilution	Colle 01  Method Ref.  SW846 8082A	ection Date -Mar-11 11  Prepared  07-Mar-11  " " " " " "	/Time :20 Analyzed	Rec 03-I	ceived Mar-11 Batch	Cert.  X X X X X X

Sample Id	dentification		Clien	at Project#		<u>Matrix</u>	<u>Colle</u>	ction Date	/Time	Re	<u>ceived</u>	
SB25194	-07		18112	5.1000.000	ı	Substrate	01-	-Mar-11 11	:35	03-1	Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolat	ile Organic Compounds by GC											
	inated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		µg/kg dry	56.3	1	SW846 8082A	07- <b>M</b> ar-11	09-Mar-11	IMR	1103856	×
11104-28-2	Aroclar-1221	BRL		µg/kg dry	56.3	1	4.	17	**	н	10	х
11141-16-5	Aroclor-1232	BRL		µg/kg dry	56.3	1	· ·	17	я	N	11	х
53469-21-9	Aroclor-1242	BRL		µg/kg dry	56.3	1	17	10	•	"	m	Х
12672-29-6	Aroclar-1248	BRL		µg/kg dry	56.3	1	17	10	#		н	Х
11097-69-1	Aroclor-1254	BRL		µg/kg dry	56.3	1	Ħ	10	ır	*	н	Х
11096-82-5	Aroclar-1260	BRL		µg/kg dry	56.3	1	ır	H	17	"	u	Х
37324-23-5	Areclor-1262	BRL		µg/kg dry	56.3	1	H	19	17	,,	н	Х
11100-14-4	Aroclor-1268	BRL		µg/kg dry	56.3	1	10	н	**	•	19	X
Surrogate	recoveries:					***************************************			7.7.0			TAM
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	78			30-150 %		19	н	п	4	и	
10386-84-2	4,4-DB-Octafluorobiphenyi (Sr) [2C]	82			30-150 %		10	н	n	41	19	
2051-24-3	Decachlorobiphenyl (Sr)	88			30-150 %		u	H	"	**	N	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	85			30-150 %		н	Ħ	H		14	
General C	Chemistry Parameters											
	% Solids	97.9		%		1	SM2540 G Mod.	03-Mar-11	03-Mar-11	JLH	1103794	
					tara kalendara sa mara	CONTRACTOR SCHOOLS			THE PARTY SIX NAMES AND ADDRESS.	Annels of Financian		COMPANIES.
									or or desired white	aran an and an		
	<u>dentification</u>		Clien	t Project#	The second secon	Matrix	Colle					
8EJC				t Project # 5.1000.000		<u>Matrix</u> Substrate		ection Date	/Time	Re	ceived Mar-11	
								ection Date	/Time	Re	<u>ceived</u>	
8EJC		Result			*RDL			ection Date -Mar-1111	/Time	<u>Re</u> 03-1	ceived Mar-11	
SB25194	-08	Result	18112	5.1000.000		Substrate	01-	ection Date -Mar-1111	/ <u>Time</u> 1:44	<u>Re</u> 03-1	ceived Mar-11	
SEJC SB25194 CAS No. Semivolat Polychlori	-08 Analyte(s)	Result	18112	5.1000.000		Substrate	01-	ection Date -Mar-1111	/ <u>Time</u> 1:44	<u>Re</u> 03-1	ceived Mar-11	
8EJC SB25194 CAS No. Semivolat Polychlori Prepared	-08  Analyte(s)  ile Organic Compounds by GC  inated Biphenyls by SW846 8082	<i>Result</i> BRL	18112	5.1000.000		Substrate	01-	ection Date -Mar-11 11 Prepared	/ <u>Time</u> 1:44	<u>Re</u> 03-1	ceived Mar-11	Cert.
8EJC SB25194 CAS No. Semivolat Polychlori Prepared	-08  Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C		18112	5.1000.000 Units	*RDL	Substrate  Dilution	Method Ref.	ection Date -Mar-11 11 Prepared	/Time :44 Analyzed	Re 03-1 Analyst	ceived Mar-11	Cert.
8EJC SB25194 CAS No. Semivolat Polychlor Prepared 12674-11-2	-08  Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C  Aroctor-1016	BRL	18112	5.1000.000 <i>Units</i> μg/kg dry	*RDL	Substrate  Dilution	Method Ref.	ection Date -Mar-11 11 Prepared	/Time :44 Analyzed	Re 03-1 Analyst	ceived Mar-11	Cert.
SEJC SB25194 CAS No. Semivolat Polychlor Prepared 12674-11-2 11104-28-2	-08  Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C  Aroctor-1016  Aroctor-1221	BRL BRL	18112	Units  μg/kg dry μg/kg dry	*RDL 59.2 59.2	Dilution  1 1	Method Ref.	ection Date -Mar-11 11 Prepared	/Time :44 Analyzed	Re- 03-] Analyst IMR	ceived Mar-11	Cert.
8EJC SB25194- CAS No. Semivolat Polychlor Prepared 12674-11-2 11104-28-2 11141-16-5	-08  Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C  Aroclor-1016  Aroclor-1221  Aroclor-1232	BRL BRL BRL	18112	Units  Units  ug/kg dry  ug/kg dry  ug/kg dry	*RDL 59.2 59.2 59.2	Dilution  1 1 1	Method Ref.	Prepared  07-Mar-11  "	/Time  :44   Analyzed   09-Mar-11   "	Re. 03-1 Analyst IMR	ceived Mar-11	Cert. X X X
8EJC SB25194 CAS No. Semivolat Polychlor Prepared 12674-11-2 11104-28-2 11141-16-5 53469-21-9	-08  Analyte(s)  ile Organic Compounds by GC inated Biphenryls by SW846 8082 by method SW846 3540C  Aroctor-1016  Aroctor-1221  Aroctor-1232  Aroctor-1242  Aroctor-1248	BRL BRL BRL BRL	18112	Units  Hg/kg dry Hg/kg dry Hg/kg dry Hg/kg dry	*RDL  59.2 59.2 59.2 59.2	Dilution  1 1 1 1	Method Ref.	Prepared  07-Mar-11  " "	/Time :44 Analyzed	Re 03-1  Analyst  IMR  "	Ceived Mar-11  Batch  1103856	Cert.
8EJC SB25194 CAS No. Semivolat Polychlor Prepared 12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6	Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C  Aroctor-1016 Aroctor-1221 Aroctor-1232 Aroctor-1242 Aroctor-1248 Aroctor-1254	BRL BRL BRL BRL BRL	18112	Units  Hg/kg dry Hg/kg dry Hg/kg dry Hg/kg dry Hg/kg dry	*RDL  59.2 59.2 59.2 59.2 59.2	Dilution  1 1 1 1 1	Method Ref.  SW846 8082A	oction Date -Mar-I1 II  Prepared  07-Mar-11  " " "	/Time  :44   Analyzed   09-Mar-11   "	Rec 03-1  Analyst  IMR  """	Batch	Cert.  X X X X
8EJC SB25194 CAS No. Semivolat Polychlor Prepared 12874-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1	Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C  Aroctor-1016 Aroctor-1221 Aroctor-1232 Aroctor-1242 Aroctor-1248 Aroctor-1254	BRL BRL BRL BRL BRL	18112	Units  Hg/kg dry Hg/kg dry Hg/kg dry Hg/kg dry Hg/kg dry Hg/kg dry	*RDL  59.2 59.2 59.2 59.2 59.2 59.2	Dilution  1 1 1 1 1 1	Method Ref.  SW846 8082A	oction Date -Mar-11 11  Prepared  07-Mar-11  """ """	/Time  :44   Analyzed   09-Mar-11   "   "   "   "   "   "   "   "   "   "	Re- 03-J Analyst	Batch	Cert.  X X X X X
8EJC SB25194 CAS No. Semivolat Polychlor Prepared 12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1 11096-82-5	Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C  Aroclor-1016  Aroclor-1221  Aroclor-1232  Aroclor-1242  Aroclor-1248  Aroclor-1254  Aroclor-1260	BRL BRL BRL BRL BRL BRL	18112	Units  Hg/kg dry	*RDL  59.2 59.2 59.2 59.2 59.2 59.2 59.2 59.	Dilution  1 1 1 1 1 1 1 1	Method Ref.  SW846 8082A	oction Date -Mar-11 11  Prepared  07-Mar-11  """  """  """  ""  """	/Time  :44   Analyzed   09-Mar-11   "   "   "   "   "   "   "   "   "   "	Rec 03-J	Batch	Cert.  X X X X X X
8EJC SB25194 CAS No. Semivolat Polychlor Prepared 12874-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1 11096-82-5 37324-23-5 11100-14-4	Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C  Aroctor-1016  Aroctor-1221  Aroctor-1232  Aroctor-1242  Aroctor-1248  Aroctor-1254  Aroctor-1260  Aroctor-1262	BRL BRL BRL BRL BRL BRL BRL	18112	Units  Hg/kg dry	*RDL  59.2 59.2 59.2 59.2 59.2 59.2 59.2 59.	Dilution  1 1 1 1 1 1 1 1 1 1	Method Ref.  SW846 8082A	oction Date -Mar-11 11  Prepared  07-Mar-11  """  """  """  ""  """	/Time  :44   Analyzed   09-Mar-11   "   "   "   "   "   "   "   "   "   "	Re 03-]  Analyst  IMR  " " "	ceived Mar-11 Batch	Cert.  X X X X X X
8EJC SB25194 CAS No. Semivolat Polychlon Prepared 12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1 11096-82-5 37324-23-5 11100-14-4 Surrogate	Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C  Aroctor-1015 Aroctor-1221 Aroctor-1232 Aroctor-1242 Aroctor-1248 Aroctor-1254 Aroctor-1260 Aroctor-1262 Aroctor-1268	BRL BRL BRL BRL BRL BRL BRL	18112	Units  Hg/kg dry	*RDL  59.2 59.2 59.2 59.2 59.2 59.2 59.2 59.	Dilution  1 1 1 1 1 1 1 1 1 1	Method Ref.  SW846 8082A	oction Date -Mar-11 11  Prepared  07-Mar-11  """  """  """  ""  """	/Time  :44   Analyzed   09-Mar-11   "   "   "   "   "   "   "   "   "   "	Re 03-]  Analyst  IMR  " " "	ceived Mar-11 Batch	Cert.  X X X X X X
8EJC SB25194 CAS No. Semivolat Polychlon Prepared 12874-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1 11096-82-5 37324-23-5 11100-14-4 Surrogate	Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C  Aroctor-1016  Aroctor-1221  Aroctor-1232  Aroctor-1242  Aroctor-1248  Aroctor-1254  Aroctor-1260  Aroctor-1262  Aroctor-1268  recoveries: 4,4-DB-Octafluorobiphenyl (Sr)	BRL BRL BRL BRL BRL BRL BRL BRL	18112	Units  Hg/kg dry	*RDL  59.2 59.2 59.2 59.2 59.2 59.2 59.2 59.	Dilution  1 1 1 1 1 1 1 1 1 1	Method Ref.  SW846 8082A	oction Date -Mar-11 11  Prepared  07-Mar-11  """  """  """  ""  """	/Time  :44   Analyzed   09-Mar-11   "   "   "   "   "   "   "   "   "   "	Re 03-]  Analyst  IMR  " " "	Ceived Mar-11 Batch	Cert.  X X X X X X
8EJC SB25194 CAS No. Semivolat Polychlori Prepared 12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1 11096-82-5 37324-23-5 11100-14-4 Surrogate 1 10385-84-2	Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C  Aroctor-1016  Aroctor-1221  Aroctor-1232  Aroctor-1242  Aroctor-1248  Aroctor-1254  Aroctor-1260  Aroctor-1262  Aroctor-1268  recoveries:  4,4-DB-Octafluorobiphenyl (Sr)  4,4-DB-Octafluorobiphenyl (Sr)	BRL BRL BRL BRL BRL BRL BRL	18112	Units  Hg/kg dry	*RDL  59.2 59.2 59.2 59.2 59.2 59.2 59.2 59.	Dilution  1 1 1 1 1 1 1 1 1 1	Method Ref.  SW846 8082A	oction Date -Mar-11 11  Prepared  07-Mar-11  """  """  """  ""  """  ""  ""  ""	/Time  :44   Analyzed   09-Mar-11   "   "   "   "   "   "   "   "   "   "	Re 03-]  Analyst  IMR  " " "	Ceived Mar-11 Batch	Cert.  X X X X X X
8EJC SB25194 CAS No. Semivolat Polychlori Prepared 12874-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1 11096-82-5 37324-23-5 11100-14-4 Surrogate 1 0386-84-2	Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C  Aroctor-1016  Aroctor-1221  Aroctor-1232  Aroctor-1242  Aroctor-1248  Aroctor-1254  Aroctor-1260  Aroctor-1262  Aroctor-1268  recoveries: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	BRL BRL BRL BRL BRL BRL BRL	18112	Units  Hg/kg dry	*RDL  59.2 59.2 59.2 59.2 59.2 59.2 59.2 59.	Dilution  1 1 1 1 1 1 1 1 1 1	Method Ref.  SW846 8082A	oction Date -Mar-11 11  Prepared  07-Mar-11  """  """  """  ""  ""  ""  ""  ""	/Time  :44   Analyzed   09-Mar-11   "   "   "   "   "   "   "   "   "   "	Rec 03-1	ceived Mar-11 Batch	Cert.  X X X X X X
8EJC SB25194- CAS No. Semivolat Polychlore Prepared 12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1 11096-82-5 37324-23-5 11100-14-4 Surrogate 10386-84-2 10386-84-2 2051-24-3	Analyte(s)  ile Organic Compounds by GC inated Biphenryls by SW846 8082 by method SW846 3540C  Aroclor-1016  Aroclor-1221  Aroclor-1232  Aroclor-1242  Aroclor-1254  Aroclor-1254  Aroclor-1260  Aroclor-1262  Aroclor-1268  recoveries:  4,4-DB-Octafluorobiphenyl (Sr)  4,4-DB-Octafluorobiphenyl (Sr)  [2C]  Decachlorobiphenyl (Sr)	BRL BRL BRL BRL BRL BRL BRL BRL	18112	Units  Hg/kg dry	*RDL  59.2 59.2 59.2 59.2 59.2 59.2 59.2 30-150 % 30-150 %	Dilution  1 1 1 1 1 1 1 1 1 1	Method Ref.  SW846 8082A	ortion Date  Prepared  07-Mar-11  """  """  """  """  """  ""  ""  ""	/Time  :44   Analyzed   09-Mar-11	Rec 03-J	ceived Mar-11 Batch	Cert.  X X X X X X

Sample Ion	dentification			t Project #		<u>Matrix</u>		ction Date			eived	
SB25194	-09		18112	5.1000.000	•	Substrate	01-	Mar-11 13	:20	03-1	vfar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolat	ile Organic Compounds by GC											
	inated Biphenyls by SW846 8082											
***************************************	by method SW846 3540C											
	Aroclor-1016	BRL		µg/kg dry	60.4	1	SW846 8082A		09-Mar-11		1103856	X
11104-28-2		BRL		µg/kg dry	60,4	1		"	**	**	"	Х
11141-16-5 53469-21-9	4	BRL		µg/kg dry	60.4	1	H	11	n n	11	H	X
12672-29-6		BRL		µg/kg dry	60.4	1	,,	,,	n	,,		X
11097-69-1	,	BRL		µg/kg dry	60.4	1		,,		и		X
11096-82-5	Aroclor-1254	BRL		µg/kg dry	60,4	1		n		 n	"	X
37324-23-5	Aroclor-1260	BRL		µg/kg dry	60.4	1	,	"	#	" N		X
11100-14-4	Aroclor-1262	BRL		µg/kg dry	60.4	1			**	,,		Х
	Aroclor-1268	BRL		hâ/kâ qu	60.4	<u> </u>						
•	recoveries:					•						
10386-84-2	·,·,	79			30-150 %		**	41	10	e	**	
10386-84-2	[2C]	85			30-150 %		H	78	н	#	44	
2051-24-3	Decachlorobiphenyl (Sr)	106			30-150 %		4	M,	н	"		
2051-24-3	Decachlorobiphenyl (Sr) [2C]	87			30-150 %		10	н	AT .	н	н	
General C	Chemistry Parameters											
TATAL MARKET NAME OF THE PARTY	% Solids	99.9		%			SM2540 G Mod.			JLH	1103794	
			A COLUMN TO A									
C 1- T	1											
	dentification		Clien	t Project#		<u>Matrix</u>	<u>Coile</u>	ction Date	/Time	Re	ceived	
10DC				t Project # 5.1000.000		<u>Matrix</u> Substrate	•	ection Date -Mar-11 13			ceived Mar-11	
							•					
10DC		Result					•	-Mar-11 13		03-1	Mar-11	Cert.
10DC SB25194 CAS No.	-10	Result	18112	5.1000.000	)	Substrate	01-	-Mar-11 13	3:24	03-1	Mar-11	Cert.
10DC SB25194 CAS No. Semivolat	-10 Analyte(s)	Result	18112	5.1000.000	)	Substrate	01-	-Mar-11 13	3:24	03-1	Mar-11	Cert.
SB25194  CAS No.  Semivolat  Polychlor	-10  Analyte(s) ile Organic Compounds by GC	Result	18112	5.1000.000	)	Substrate	01-	-Mar-11 13	3:24	03-1	Mar-11	Cert.
10DC SB25194 CAS No. Semivolat Polychlor Prepared	-10  Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082	<i>Result</i>	18112	5.1000.000	)	Substrate	01-	-Mar-11 13	3:24	03-1	Mar-11	
10DC SB25194 CAS No. Semivolat Polychlor Prepared	-10  Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C	BRL BRL	18112	5.1000.000 Units	*RDL	Substrate	01-	-Mar-11 13	3:24  Analyzed	03-1	Mar-11  Batch	
10DC SB25194 CAS No. Semivolat Polychlor Prepared 12674-11-2 11104-28-2 11141-16-5	-10  Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C  Aroclor-1016	BRL	18112	5.1000.000 <i>Units</i> μg/kg dry	*RDL	Substrate  Dilution  1 1	01-	-Mar-11 13	3:24  Analyzed	03-1	Mar-11  Batch	×
CAS No. Semivolat Polychlor Prepared 12674-11-2 11104-28-2	Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C  Aroclor-1016 Aroclor-1221	BRL BRL	18112	Units  μg/kg dry μg/kg dry	*RDL 62.4 62.4	Substrate  Dilution  1 1	01-	-Mar-11 13	3:24  Analyzed	03-1	Mar-11  Batch	×
10DC SB25194 CAS No. Semivolat Polychlor Prepared 12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6	-10  Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C  Aroclor-1016  Aroclor-1221  Aroclor-1232	BRL BRL BRL	18112	Units  Units  ug/kg dry  ug/kg dry  ug/kg dry	*RDL  62.4 62.4 62.4	Dilution  1 1 1	01-	-Mar-11 13	Analyzed  O9-Mar-11	03-l	Mar-11  Batch	× × ×
10DC SB25194 CAS No. Semivolat Polychlor Prepared 12674-11-2 11104-28-2 11141-16-5 53469-21-9	-10  Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C  Aroclor-1016  Aroclor-1221  Aroclor-1232  Aroclor-1242	BRL BRL BRL BRL	18112	Units  Units  ug/kg dry  ug/kg dry  ug/kg dry  ug/kg dry	*RDL  62.4 62.4 62.4 62.4 62.4	Substrate  Dilution  1 1 1 1	01-	-Mar-11 13	Analyzed  09-Mar-11	03-l	Mar-11  Batch  1103856	× × ×
10DC SB25194 CAS No. Semivolat Polychlor Prepared 12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6	Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C  Aroclor-1016 Aroclor-1221 Aroclor-1232 Aroclor-1242 Aroclor-1248 Aroclor-1254	BRL BRL BRL BRL	18112	Units  Units  ug/kg dry  ug/kg dry  ug/kg dry  ug/kg dry  ug/kg dry	*RDL  62.4 62.4 62.4 62.4 62.4 62.4	Substrate  Dilution  1 1 1 1 1	01-	Prepared  07-Mar-11  " " "	Analyzed  O9-Mar-11	03-l	Mar-11  Batch  1103856	x x x x
10DC SB25194 CAS No. Semivolat Polychlor Prepared 12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1	-10  Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C  Aroclor-1016  Aroclor-1221  Aroclor-1232  Aroclor-1242  Aroclor-1248  Aroclor-1254	BRL BRL BRL BRL BRL BRL	18112	Units  ug/kg dry ug/kg dry ug/kg dry ug/kg dry ug/kg dry ug/kg dry	62.4 62.4 62.4 62.4 62.4 62.4	Substrate  Dilution  1 1 1 1 1 1 1	01-	Prepared  07-Mar-11	Analyzed  O9-Mar-11	03-l	Mar-11  Batch  1103856	x x x x x
10DC SB25194 CAS No. Semivolat Polychlor Prepared 12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1 11096-82-5	Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C  Aroclor-1016  Aroclor-1221  Aroclor-1232  Aroclor-1242  Aroclor-1248  Aroclor-1254  Aroclor-1260  Aroclor-1262	BRL BRL BRL BRL BRL BRL	18112	Units  Units  ug/kg dry	*RDL  62.4 62.4 62.4 62.4 62.4 62.4 62.4	Substrate  Dilution  1 1 1 1 1 1 1 1 1 1	01-	Prepared  07-Mar-11  " " " "	3:24  Analyzed  09-Mar-11	03-l	Mar-11  Batch  1103856	x x x x x
10DC SB25194 CAS No. Semivolat Polychlor Prepared 12674-11-2 11104-28-2 11104-28-2 11104-28-2 11107-69-1 11096-82-5 37924-23-5 11100-14-4	Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C  Aroclor-1016  Aroclor-1221  Aroclor-1232  Aroclor-1242  Aroclor-1248  Aroclor-1254  Aroclor-1260  Aroclor-1262	BRL BRL BRL BRL BRL BRL	18112	Units  Un	*RDL  62.4 62.4 62.4 62.4 62.4 62.4 62.4 62.	Substrate  Dilution  1 1 1 1 1 1 1 1 1 1 1	Method Ref.  SW846 8082A	Prepared  07-Mar-11  """  """  """	3:24  Analyzed  09-Mar-11	03-l	Mar-11  Batch  1103856	× × × × × × × × ×
10DC SB25194 CAS No. Semivolat Polychlor Prepared 12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1 11096-82-5 37324-23-5 11100-14-4 Surrogate	Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C  Aroclor-1016  Aroclor-1221  Aroclor-1232  Araclor-1242  Aroclor-1248  Aroclor-1254  Aroclor-1260  Aroclor-1262  Aroclor-1268	BRL BRL BRL BRL BRL BRL	18112	Units  Un	*RDL  62.4 62.4 62.4 62.4 62.4 62.4 62.4 62.	Substrate  Dilution  1 1 1 1 1 1 1 1 1 1 1	Method Ref.  SW846 8082A	Prepared  07-Mar-11  """  """  """	3:24  Analyzed  09-Mar-11	03-l	Mar-11  Batch  1103856	× × × × × × × × ×
10DC SB25194 CAS No. Semivolat Polychlor Prepared 12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1 11096-82-5 37324-23-5 11100-14-4 Surrogate	Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C  Aroclor-1016 Aroclor-1221 Aroclor-1232 Aroclor-1242 Aroclor-1248 Aroclor-1254 Aroclor-1260 Aroclor-1260 Aroclor-1268  recoveries: 4,4-DB-Octafluorobiphenyl (Sr)	BRL BRL BRL BRL BRL BRL BRL	18112	Units  Un	*RDL  62.4 62.4 62.4 62.4 62.4 62.4 62.4 62.	Substrate  Dilution  1 1 1 1 1 1 1 1 1 1 1	Method Ref.  SW846 8082A	Prepared  07-Mar-11  """  """  """	3:24  Analyzed  09-Mar-11	O3-I	Mar-11  Batch  1103856	× × × × × × × × ×
10DC SB25194 CAS No. Semivolat Polychlor Prepared 12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1 11096-82-5 37324-23-5 11100-14-4 Surrogate 10386-84-2	Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C  Aroclor-1016  Aroclor-1221  Aroclor-1232  Aroclor-1242  Aroclor-1248  Aroclor-1254  Aroclor-1260  Aroclor-1262  Aroclor-1268  recoveries:  4,4-DB-Octafluorobiphenyl (Sr)  4,4-DB-Octafluorobiphenyl (Sr)	BRL BRL BRL BRL BRL BRL BRL	18112	Units  Un	*RDL  62.4 62.4 62.4 62.4 62.4 62.4 62.4 62.	Substrate  Dilution  1 1 1 1 1 1 1 1 1 1 1	Method Ref.  SW846 8082A	Prepared  07-Mar-11  """  """  """  """  """  """  """	3:24  Analyzed  09-Mar-11	O3-I	Mar-11  Batch  1103856	× × × × × × × × ×
10DC SB25194 CAS No. Semivolat Polychlor Prepared 12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1 11096-82-5 37324-23-5 11100-14-4 Surrogate 10386-84-2	Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C  Aroctor-1016 Aroctor-1221 Aroctor-1232 Aroctor-1242 Aroctor-1248 Aroctor-1254 Aroctor-1260 Aroctor-1260 Aroctor-1262 Aroctor-1268  recoveries: 4,4-DB-Octafluorobiphenyl (Sr) {2C]	BRL BRL BRL BRL BRL BRL BRL	18112	Units  Un	62.4 62.4 62.4 62.4 62.4 62.4 62.4 62.4	Substrate  Dilution  1 1 1 1 1 1 1 1 1 1 1	Method Ref.  SW846 8082A	Prepared  07-Mar-11  """  """  """	3:24  Analyzed  09-Mar-11	O3-I	Mar-11  Batch  1103856	× × × × × × × × ×
10DC SB25194 CAS No. Semivolat Polychlor Prepared 12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1 11096-82-5 37324-23-5 11100-14-4 Surrogate 10386-84-2 2051-24-3 2051-24-3	Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C  Aroclor-1016 Aroclor-1221 Aroclor-1232 Aroclor-1242 Aroclor-1248 Aroclor-1254 Aroclor-1260 Aroclor-1262 Aroclor-1268 recoveries: 4,4-DB-Octafluorobiphenyl (Sr) 4,4-DB-Octafluorobiphenyl (Sr) [2C] Decachlorobiphenyl (Sr)	BRL	18112	Units  Un	62.4 62.4 62.4 62.4 62.4 62.4 62.4 62.4	Substrate  Dilution  1 1 1 1 1 1 1 1 1 1 1	Method Ref.  SW846 8082A	Prepared  07-Mar-11  """  """  """  """  """  """  """	3:24  Analyzed  09-Mar-11	O3-I	Mar-11  Batch  1103856	× × × × × × × × ×

Sample Id 11EPC SB25194	dentification -11			t Project # 5.1000.000	)	<u>Matrix</u> Substrate		ection Date -Mar-11 13			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Polychlori	ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C	,										
	Aroclor-1016	BRL		μg/kg dry	60.7	1	SW846 8082A	07-Mar-11	09-Mar-11	IMR	1103856	x
11104-28-2	Aroclor-1221	BRL		μg/kg dry	60.7	1	11	**	**	11	11	x
11141-16-5	Aroclor-1232	BRL		μg/kg dry	60.7	1	п	**	**	"	н	X
53469-21-9	Aroclor-1242	BRL		μg/kg dry	60.7	1	н	17	17	*	**	х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	60.7	1	11	10	**		*	х
11097-69-1	Aroclor-1254	70.7		μg/kg dry	60.7	1			14	н	**	X
11096-82-5	Aroclor-1260	BRL		μg/kg dry	60.7	1		н		**	"	х
37324-23-5	Aroclor-1262	BRL		μġ/kg dry	60.7	1	п	н	u	н	*	x
11100-14-4	Aroclor-1268	BRL		μg/kg dry	60.7	1	п	н	н	ч	le	X
Surrogate	recoveries:			····								·
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	87			30-150 %		n	**			ır	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	93			30-150 %		н	41	11	<b>4</b> r		
2051-24-3	Decachlorobiphenyl (Sr)	110			30-150 %		n	11	•	50	**	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	98			30-150 %		"		11	**	н	
General C	hemistry Parameters											
	% Solids	99.4		%		1	SM2540 G Mod.	03-Mar-11	03-Mar-11	BD	1103799	
Sample Ic 12EPC SB25194	dentification -12			t <u>Project #</u> 5.1000.000		<u>Matrix</u> Substrate		ection Date -Mar-11 13			ceived Mar-11	
12EPC		Result						-Mar-11 13		03-1	Mar-11	Cert
12EPC SB25194 CAS No.	-12 Analyte(s)	Result	18112	5.1000.000		Substrate	01	-Mar-11 13	3:47	03-1	Mar-11	Cert.
12EPC SB25194- CAS No. Semivolati Polychlori	-12  Analyte(s) ile Organic Compounds by GC nated Biphenyls by SW846 8082	Result	18112	5.1000.000		Substrate	01	-Mar-11 13	3:47	03-1	Mar-11	Cert
12EPC SB25194 CAS No. Semivolati Polychlori Prepared	-12  Analyte(s)  ile Organic Compounds by GC	Result BRL	18112	5.1000.000		Substrate	01	-Mar-11 13	3:47	03-1	Mar-11	
12EPC SB25194 CAS No. Semivolati Polychlori Prepared	Analyte(s)  ille Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C	-	18112	5.1000.000 <i>Units</i> µg/kg dry	*RDL	Substrate  Dilution	Method Ref.	-Mar-11 13	3:47 Analyzed	03-l	Mar-11	
12EPC SB25194- CAS No. Semivolati Polychlori Prepared 12674-11-2	Analyte(s)  ile Organic Compounds by GC nated Biphenyls by SW846 8082 by method SW846 3540C Aroclor-1016	BRL	18112	5.1000.000	*RDL	Substrate  Dilution	Method Ref.	-Mar-11 13	3:47 Analyzed	03-l	Mar-11	×
12EPC SB25194- CAS No. Semivolati Polychlori Prepared 12674-11-2 11104-28-2	Analyte(s)  ile Organic Compounds by GC nated Biphenyls by SW846 8082 by method SW846 3540C Aroctor-1016 Aroctor-1221	BRL BRL	18112	5.1000.000  Units  ug/kg dry  ug/kg dry	*RDL 64.1 64.1	Dilution  1 1	Method Ref.	-Mar-11 13	3:47 Analyzed	03-l	Mar-11	x x
12EPC SB25194- CAS No. Semivolati Polychlori Prepared 12674-11-2 11104-28-2 11141-16-5	Analyte(s)  Ile Organic Compounds by GC Inated Biphenyls by SW846 8082 by method SW846 3540C  Aroctor-1016  Aroctor-1221  Aroctor-1232	BRL BRL BRL	18112	Units  Units  ug/kg dry  ug/kg dry  ug/kg dry	*RDL 64.1 64.1 64.1	Substrate  Dilution  1 1 1	Method Ref.	-Mar-11 13	Analyzed  O9-Mar-11	03-3	Mar-11	× × ×
12EPC SB25194- CAS No. Semivolati Polychlori Prepared 12674-11-2 11104-28-2 11141-16-5 53469-21-9	Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C Aroclor-1016 Aroclor-1221 Aroclor-1232 Aroclor-1242	BRL BRL BRL	18112	Units  Units  Units  Units  Units	64.1 64.1 64.1 64.1	Dilution  1 1 1 1	Method Ref.	Prepared  07-Mar-11	3:47  Analyzed  09-Mar-11	03-3	Mar-11	X X X
12EPC SB25194- C4S Na. Semivolati Polychlori Prepared 12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6	Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C  Aroctor-1016  Aroctor-1221  Aroctor-1232  Aroctor-1242  Aroctor-1248	BRL BRL BRL BRL	18112	Units  Units  ug/kg dry  ug/kg dry  ug/kg dry  ug/kg dry  ug/kg dry	64.1 64.1 64.1 64.1 64.1	Dilution  1 1 1 1 1	Method Ref.	Prepared  07-Mar-11	Analyzed  O9-Mar-11	O3-3	Mar-11	x x x x
12EPC SB25194- CAS No. Semivolati Polychlori Prepared 12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1	Analyte(s)  ile Organic Compounds by GC mated Biphenyls by SW846 8082 by method SW846 3540C  Aroctor-1016  Aroctor-1221  Aroctor-1232  Aroctor-1242  Aroctor-1248  Aroctor-1254	BRL BRL BRL BRL BRL	18112	Units  Units  ug/kg dry  ug/kg dry  ug/kg dry  ug/kg dry  ug/kg dry  ug/kg dry	*RDL 64.1 64.1 64.1 64.1 64.1	Dilution  1 1 1 1 1 1	Method Ref.  SW846 8082A	-Mar-11 13 Prepared  07-Mar-11	3:47  Analyzed  09-Mar-11	O3-I	Mar-11	x x x x x
12EPC SB25194- CAS No. Semivolati Polychlori Prepared 12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1 11096-82-5	Analyte(s)  Ille Organic Compounds by GC Inated Biphenyls by SW846 8082 by method SW846 3540C  Aroctor-1016  Aroctor-1221  Aroctor-1232  Aroctor-1242  Aroctor-1248  Aroctor-1254  Aroctor-1256	BRL BRL BRL BRL 55.7	18112	Units  Units  ug/kg dry	*RDL  64.1 64.1 64.1 64.1 64.1 64.1 64.1	Dilution  1 1 1 1 1 1 1 1	Method Ref.  SW846 8082A	-Mar-11 13 Prepared  07-Mar-11 " " " "	9:47  Analyzed  09-Mar-11	O3-3	Mar-11  Batch  1103856	x x x x x
12EPC SB25194- CAS No. Semivolati Polychlori Prepared 12674-11-2 11104-28-2 11104-28-2 11104-28-2 11097-69-1 11096-82-5 37324-23-5 11100-14-4	Analyte(s)  Ile Organic Compounds by GC Inated Biphenyls by SW846 8082 by method SW846 3540C  Aroctor-1016  Aroctor-1221  Aroctor-1232  Aroctor-1242  Aroctor-1248  Aroctor-1254  Aroctor-1260  Aroctor-1262  Aroctor-1268	BRL BRL BRL BRL 75.7 BRL	18112	Units  Units  ug/kg dry   *RDL  64.1 64.1 64.1 64.1 64.1 64.1 64.1	Dilution	Method Ref.  SW846 8082A	Prepared  07-Mar-11  " " " " "	09-Mar-11	O3-3	Mar-11  Batch  1103856	× × × × × × × ×	
12EPC SB25194- CAS No. Semivolati Polychlori Prepared 12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1 11096-82-5 37324-23-5 11100-14-4 Surrogate	Analyte(s)  Ille Organic Compounds by GC Inated Biphenyls by SW846 8082 by method SW846 3540C  Aroctor-1016  Aroctor-1221  Aroctor-1232  Aroctor-1242  Aroctor-1248  Aroctor-1254  Aroctor-1250  Aroctor-1262  Aroctor-1268	BRL BRL BRL BRL 75.7 BRL BRL BRL	18112	Units  Units  ug/kg dry   64.1 64.1 64.1 64.1 64.1 64.1 64.1 64.1	Dilution	Method Ref.  SW846 8082A	Prepared  07-Mar-11  " " " " "	09-Mar-11	O3-3	Mar-11  Batch  1103856	× × × × × × × ×	
12EPC SB25194- CAS No. Semivolati Polychlori Prepared 12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1 11096-82-5 37324-23-5 11100-14-4 Surrogate	Analyte(s)  ille Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C Aroclor-1016 Aroclor-1221 Aroclor-1232 Aroclor-1242 Aroclor-1248 Aroclor-1254 Aroclor-1254 Aroclor-1260 Aroclor-1262 Aroclor-1268  recoveries: 4,4-DB-Octafluorobiphenyl (Sr) 4,4-DB-Octafluorobiphenyl (Sr)	BRL BRL BRL BRL 75.7 BRL	18112	Units  Units  ug/kg dry   *RDL  64.1 64.1 64.1 64.1 64.1 64.1 64.1	Dilution	Method Ref.  SW846 8082A	Prepared  07-Mar-11  " " " " "	09-Mar-11	O3-3	Mar-11  Batch  1103856	× × × × × × × ×	
12EPC SB25194- CAS No. Semivolati Prepared 12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1 11096-82-5 37324-23-5 11100-14-4 Surrogate 1 10386-84-2	Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C  Aroctor-1016  Aroctor-1221  Aroctor-1232  Aroctor-1242  Aroctor-1248  Aroctor-1254  Aroctor-1254  Aroctor-1260  Aroctor-1262  Aroctor-1268  recoveries:  4,4-DB-Octafluorobiphenyl (Sr)	BRL BRL BRL BRL 75.7 BRL BRL BRL	18112	Units  Units  ug/kg dry   *RDL  64.1 64.1 64.1 64.1 64.1 64.1 64.1 64.	Dilution	Method Ref.  SW846 8082A	-Mar-11 13  Prepared  07-Mar-11  """  """  """  """  """  """  """	09-Mar-11	O3-3	Mar-11  Batch  1103856	× × × × × × × ×	
12EPC SB25194- CAS No. Semivolati Polychlori Prepared 12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1 11096-82-5 37324-23-5 11100-14-4 Surrogate 1 10386-84-2 10386-84-2	Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C Aroctor-1016 Aroctor-1221 Aroctor-1232 Aroctor-1242 Aroctor-1248 Aroctor-1254 Aroctor-1260 Aroctor-1262 Aroctor-1268  recoveries: 4,4-DB-Octafluorobiphenyl (Sr) 4,4-DB-Octafluorobiphenyl (Sr) [2C]	BRL BRL BRL BRL 75.7 BRL BRL BRL	18112	Units  Units  ug/kg dry   *RDL  64.1 64.1 64.1 64.1 64.1 64.1 64.1 64.	Dilution	Method Ref.  SW846 8082A	-Mar-11 13  Prepared  07-Mar-11  """  """  """  """  """  """  """	09-Mar-11	O3-3	Mar-11  Batch  1103856	× × × × × × × ×	
12EPC SB25194- CAS No. Semivolati Polychlori Prepared 12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1 11096-82-5 37324-23-5 11100-14-4 Surrogate 1 10386-84-2 10386-84-2 2051-24-3 2051-24-3	Analyte(s)  ile Organic Compounds by GC inated Biphenyls by SW846 8082 by method SW846 3540C  Aroctor-1016  Aroctor-1221  Aroctor-1232  Aroctor-1242  Aroctor-1248  Aroctor-1254  Aroctor-1260  Aroctor-1262  Aroctor-1268  recoveries:  4,4-DB-Octafluorobiphenyl (Sr) 4,4-DB-Octafluorobiphenyl (Sr) [2Cj  Decachlorobiphenyl (Sr)	BRL BRL BRL BRL 75.7 BRL BRL BRL 80 82	18112	Units  Units  ug/kg dry   64.1 64.1 64.1 64.1 64.1 64.1 64.1 64.1	Dilution	Method Ref.  SW846 8082A	-Mar-11 13  Prepared  07-Mar-11  """  """  """  """  """  """  """	09-Mar-11	O3-I	Mar-11  Batch  1103856	× × × × × × × × × × × × × × × × × × ×	

# Semivolatile Organic Compounds by GC - Quality Control

nalyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
atch 1103856 - SW846 3540C										
Blank (1103856-BLK1)					Pre	epared: 07-	Mar-11 An	alyzed: 08-N	Mar-11	
Aroclor-1016	BRL		µg/kg wet	20.0						
Aroclor-1016 [2C]	BRL		μg/kg wet	20,0						
Aroclor-1221	BRL		µg/kg wet	20.0						
Aroclor-1221 [2C]	BRL		µg/kg wet	20.0						
Arociar-1232	BRL		μg/kg wet	20.0						
Aroclor-1232 [2C]	BRL		μg/kg wet	20.0						
Arocior-1242	BRL		μg/kg wet	20.0						
Aroclor-1242 [2C]	BRL		μg/kg wet	20.0						
Aroclor-1248	BRL		μg/kg wet	20.0						
Aroclor-1248 [2C]	BRL		µg/kg wet	20.0						
Aroclor-1254	BRL		μg/kg wet	20.0						
Aroclor-1254 [2C]	BRL		µg/kg wet	20.0						
Arodor-1260	BRL		μg/kg wet	20.0						
Aroclor-1260 [2C]	BRL		µg/kg wet	20.0						
Aroclor-1262	BRL		μg/kg wet	20,0						
Aroclor-1262 [2C]	BRL		μg/kg wet	20.0						
Aroclor-1268	BRL		μg/kg wet	20.0						
Aroclor-1268 [2C]	BRL		µg/kg wet	20.0						
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	15.1		µg/kg wet		20.0		76	30-150		·
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	15.2		µg/kg wet		20.0		76	30-150		
Surrogate: Decachlorobiphenyl (Sr)	21.9		μg/kg wet		20.0		110	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	21.2		μg/kg wet		20.0		106	30-150		
LCS (1103856-BS1)					Pr	epared: 07-	Mar-11 Ar	alyzed: 08-l	Mar-11	
Aroclor-1016	213		μg/kg wet	20.0	250		85	50-140		
Aroclor-1016 [2C]	235		μg/kg wet	20.0	250		94	50-140		
Aroclor-1260	218		μg/kg wet	20.0	250		87	50-140		
Aroclor-1260 [2C]	202		µg/kg wet	20.0	250		81	50-140		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	17.3		µg/kg wet		20.0		86	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	18.8		µg/kg wet		20.0		94	30-150		
Surrogate: Decachlorobiphenyl (Sr)	22.9		μg/kg wet		20.0		115	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	22.4		μg/kg wet		20.0		112	30-150		
LCS Dup (1103856-BSD1)					<u>P</u> ŗ	epared: 07	-Mar-11 Ar	nalyzed: 08-	<u> Mar-11</u>	
Arodor-1016	208		μg/kg wet	20.0	250		83	50-140	2	30
Aroclor-1016 [2C]	230		μg/kg wet	20.0	250		92	50-140	2	30
Aroclor-1260	209		μg/kg wet	20.0	250		84	<b>50-14</b> 0	4	30
Aroclor-1260 [2C]	196		µg/kg wet	20,0	250		79	50-140	3	30
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	16.9		μg/kg wet		20.0		84	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	18.3		μg/kg wet		20.0		92	30-150		
Surrogate: Decachlorobiphenyl (Sr)	22.2		μg/kg wet		20.0		111	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	23.5		µg/kg wet		20.0		118	30-150		

### Notes and Definitions

BRL Below Reporting Limit - Analyte NOT DETECTED at or above the reporting limit

dry Sample results reported on a dry weight basis

NR Not Reported

RPD Relative Percent Difference

A plus sign (+) in the Method Reference column indicates the method is not accredited by NELAC.

<u>Laboratory Control Sample (LCS)</u>: A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

<u>Matrix Spike</u>: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

<u>Surrogate</u>: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

<u>Continuing Calibration Verification:</u> The calibration relationship established during the initial calibration must be verified at periodic intervals. Concentrations, intervals, and criteria are method specific.

Validated by: June O'Connor

21 GRIFFIN ROAD NORTH

WINDSOR, CONNECTICUT 06095 TELEPHONE (860) 298-9692 FAX (860) 298-6380 PROJECT NUMBER

# CHAIN OF CUSTODY

Edition: September 2007 Supersede Previous Edition

SB28194 By

LAB ID#.

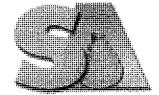
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DATE	TIME	COMP	GRAB	SAMPLE LOCATION	EPA 80											
3/1/11	1020		×	See Drawing	×					12" Substrate S	ample		183	76.	- p	
3/1/11	1024		×	See Drawing	×					6" Substrate Sa	mple		-		70	
3/1/11	1031		×	See Drawing	×	-				12" Substrate S	ample				23	
3/1/11	1037.		×	See Drawing	Х					6" Substrate Sa	mple				170	
11/1/6	1108		×	See Drawing	X					12" Substrate S	ample			,	7.0	
3/1/11	1120		×	See Drawing	×					6" Substrate Sa	mple				94	
11/1/6	1135		×	See Drawing	×		7		4	12" Substrate S	ample				33.	
11/1/8	1144		×	See Drawing	×	24				6" Substrate Sa	aldui		- 7 - 45		8	- I
3/1/11	1320		×	See Drawing	×					12" Substrate S	ample				60	
11/1/6	1324	100 1004 1004	×	See Drawing	×					6" Substrate Sa	mple		14.3 11.5		٥	
3/1/11	1341		×	See Drawing	×					12" Substrate S	ample				-2	
3/1/11	1347		×	See Drawing	×					6" Substrate Sa	mple		V		12	,
			TIME 1020 COMP T 11320 11320 11347 11347	TIME TO COMP TT 1020 1024 1037 1037 1037 1037 1037 1037 1037 1037	HSBC-Q   H	HSBC-Quirk Middle School	HSPC-Quirk Middle School   HSPECTOR   HSPECTOR   HSPECTOR   INSPECTOR   HSPECTOR   HSP	HSBC-Quirk Middle School   HSBC-Quirk Middle School	HSBC-Quirk Middle School   HSBC-Quirk Middle School   INSPECTOR   Jonathan D. Gentile/Tom Martin   JONATHAN   JONATHAN D. Gentile/Tom Martin   JOSO   X   See Drawing   JOSO   JOSO	TriME   PARAMETERS   PARAMETERS	HSBC-Quirk Middle School   FARAMETERS   FARAMETERS	HSBC-Quirk Middle School   FARAMETERS   FARAMETERS	TACALECT NAME	TACALECT NAME	TYPECTOR   TAPE   TAP	HSBC-Quirk Middle School   PARAMETERS   Atherm   Atherm

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Remarks:	70				Page I of 1

☐ Re-Issued Report

☐ Revised Report

Report Date: 24-Mar-11 17:01



SPECTRUM ANALYTICAL, INC.

Featuring
IIANIBAL TECHNOLOGY

Laboratory Report

TRC 21 Griffin Road North Windsor, CT 06095 Attn: Jen Peshka

Project: Quirk Middle School - Hartford, CT

Project #: 181125.1000.000

Laboratory ID	Client Sample ID	<u>Matrix</u>	Date Sampled	Date Received
SB25895-01	13-B3	Brick	18-Mar-11 14:10	21-Mar-11 12:35
SB25895-02	14-B0	Brick	18-Mar-11 14:13	21-Mar-11 12:35
SB25895-03	15-B0	Brick	18-Mar-11 14:20	21-Mar-11 12:35
SB25895-04	16-B3	Brick	18-Mar-11 14:25	21-Mar-11 12:35
SB25895-05	17-B3	Brick	18-Mar-11 14:35	21-Mar-11 12:35
SB25895-06	18-B0	Brick	18-Mar-11 14:40	21-Mar-11 12:35
SB25895-07	19-B3	Brick	18-Mar-11 14:58	21-Mar-11 12:35
SB25895-08	20-B0	Brick	18-Mar-11 15:03	21-Mar-11 12:35
SB25895-09	21-B3	Brick	18-Mar-11 15:07	21-Mar-11 12:35
SB25895-10	22-B0	Brick	18-Mar-11 15:10	21-Mar-11 12:35
SB25895-11	23-B3	Brick	18-Mar-11 15:16	21-Mar-11 12:35
SB25895-12	24-B0	Brick	18-Mar-11 15:20	21-Mar-11 12:35
SB25895-13	25-B3	Brick	18-Mar-11 15:28	21-Mar-11 12:35
SB25895-14	26-B0	Brick	18-Mar-11 15:34	21-Mar-11 12:35
SB25895-15	27-B3	Brick	18-Mar-11 15:45	21-Mar-11 12:35
SB25895-16	28-B0	Brick	18-Mar-11 15:50	21-Mar-11 12:35
SB25895-17	29-B3 .	Brick	18-Mar-11 16:00	21-Mar-11 12:35
SB25895-18	30-B0	Brick	18-Mar-11 16:03	21-Mar-11 12:35
SB25895-19	31-B3	Brick	18-Mar-11 16:05	21-Mar-11 12:35
SB25895-20	32-B0	Brick	18-Mar-11 16:09	21-Mar-11 12:35
SB25895-21	33-B3	Brick	18-Mar-11 16:15	21-Mar-11 12:35
SB25895-22	34-B0	Brick	18-Mar-11 16:18	21-Mar-11 12:35
SB25895-23	35-B3	Brick	18-Mar-11 16:25	21-Mar-11 12:35
SB25895-24	36-B0	Brick	18-Mar-11 16:28	21-Mar-11 12:35
SB25895-25	37-C3	Concrete	18-Mar-11 16:34	21-Mar-11 12:35
SB25895-26	38-C0	Concrete	18-Mar-11 16:38	21-Mar-11 12:35

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.

All applicable NELAC requirements have been met.

Massachusetts # M-MA138/MA1110 Connecticut # PH-0777 Florida # E87600/E87936 Maine # MA138 New Hampshire # 2538 New Jersey # MA011/MA012 New York # 11393/11840 Pennsylvania # 68-04426/68-02924 Rhode Island # 98 USDA # S-51435



Authorized by:

Nicole Leja Laboratory Director

Spectrum Analytical holds certification in the State of New York for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of New York does not offer certification for all analytes.

Please note that this report contains 37 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Spectrum Analytical, Inc.

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### CASE NARRATIVE:

The sample temperature upon receipt by Spectrum Analytical courier was recorded as 3.6 degrees Celsius. The samples were transported on ice to the laboratory facility and the temperature was recorded at 0.5 degrees Celsius upon receipt at the laboratory. Please refer to the Chain of Custody for details specific to sample receipt times.

An infrared thermometer with a tolerance of +/- 2.0 degrees Celsius was used immediately upon receipt of the samples.

If a Matrix Spike (MS), Matrix Spike Duplicate (MSD) or Duplicate (DUP) was not requested on the Chain of Custody, method criteria may have been fulfilled with a source sample not of this Sample Delivery Group.

Required site-specific Matrix Spike/Matrix Spike Duplicate (MS/MSD) must be requested by the client and sufficient sample must be submitted for the additional analyses. Samples submitted with insufficient volume/weight will not be analyzed for site specific MS/MSD, however a batch MS/MSD may be analyzed from a non-site specific sample.

CTDEP has published a list of analytical methods which provides a series of recommended protocols for the acquisition, analysis and reporting of analytical data in support of decisions being made utilizing the Reasonable Confidence Protocol (RCP). "Reasonable Confidence" can be established only for those methods published by the CTDEP in the RCP guidelines. The compounds and/or elements reported were specifically requested by the client on the Chain of Custody and in some cases may not include the full analyte list as defined in the method. Regulatory limits may not be achieved if specific method and/or technique was not requested on the Chain of Custody.

The CTDEP RCP requests that "all non-detects and all results below the reporting limit are reported as ND (Not Detected at the Specified Reporting Limit)". All non-detects and all results below the reporting limit are reported as "BRL" (Below the Reporting Limit) in this report.

If no reporting limits were specified or referenced on the chain-of-custody the laboratory's practical quantitation limits were applied.

Tetrachloro-m-xylene is recommended as a surrogate by the CTDEP RCP for the following SW846 Methods 8081, 8082 and 8151. Spectrum Analytical, Inc. uses Tetrachloro-m-xylene as the Internal Standard for these methods and Dibromooctaflourobiphenyl as the surrogate.

See below for any non-conformances and issues relating to quality control samples and/or sample analysis/matrix.

# SW846 8082A

## **Duplicates:**

1104880-DUP1

Source: SB25895-01

Visual evaluation of the sample indicates the RPD is above the control limit due to a non-homogeneous sample matrix.

Aroclor-1254 Aroclor-1254 [2C]

### Samples:

SB25895-02

14-B0

The concentration indicated for this analyte is an estimated value. This value is considered an estimate (CLP E-flag).

Aroclor-1254

SB25895-02RE1

14-B0

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.

Decachlorobiphenyl (Sr) [2C]

SB25895-12

24-B0

### SW846 8082A

# Samples:

SB25895-12

24-B0

The concentration indicated for this analyte is an estimated value. This value is considered an estimate (CLP E-flag).

Aroclor-1254

SB25895-12RE1

24-B0

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

The surrogate recovery for this sample is not available due to sample dilution required from high analyte concentration and/or matrix interference's.

4,4-DB-Octafluorobiphenyl (Sr)

4,4-DB-Octafluorobiphenyl (Sr) [2C]

Decachlorobiphenyl (Sr)

Decachlorobiphenyl (Sr) [2C]

SB25895-14

26-B0

The concentration indicated for this analyte is an estimated value. This value is considered an estimate (CLP E-flag).

Aroclor-1254 [2C]

SB25895-14RE1

26-B0

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.

Decachlorobiphenyl (Sr) [2C]

Sample Id 13-B3 SB25895-	dentification 01			<u>t Project #</u> 5.1000.000		<u>Matrix</u> Brick		ction Date -Mar-11 14			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0546	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104880	Х
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0546	1	*	n	n	•	**	Х
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0546	1	м	н	4	**	Ħ	Х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0546	1	ur .	"	**	н	11	Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0546	1	н	78	**	h	t#	Х
11097-69-1	Aroclor-1254	0.661		mg/kg dry	0.0546	1	ri	н	н	•	н	Х
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0,0546	1	#	**	*	н	•	Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0546	1	10	•	tt	н	#	Х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0546	1	н	11	н	**	н	х
Surrogate	recoveries:								-			
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	130			30-150 %		n	•	**	н	10	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	99			30-150 %		Ħ	**	H	**	IF	
2051-24-3	Decachlorobiphenyl (Sr)	113			30-150 %		4	н	41	14	н	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	92			30-150 %		11	*17	11	н	a	
General C	hemistry Parameters											
	% Solids	99.7		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104938	i

	lentification		Clien	t Project #		<u>Matrix</u>	<u>Colle</u>	ction Date	<u>/Time</u>	Re	<u>ceived</u>	
14-B0			18112	5.1000.000		Brick	18-	-Mar-11 14	:13	21-	Маг-11	
SB25895-	·02											
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert
Semivolati	le Organic Compounds by GC										•	
	nated Biphenyls by SW846 8082											
<u>Prepared</u>	by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0652	1	SW846 8082A		·24-Mar-11	SM	1104880	
11104-28-2	Araclor-1221	BRL		mg/kg dry	0.0652	1		и		"	"	Х
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0652	1	4	Ħ	н	95	ts.	Х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0652	1	**	**	#	*	e	Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0652	1	11	19	**	n	**	Х
11097-69-1	Aroclor-1254	40.3	E	mg/kg dry	0.0652	1	н •	и	te.	4		Х
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0652	1	а	**	н		"	Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0652	1	##	D	*1	н	**	X
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0652	1	II.	***		4	**	х
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	136			30-150 %		17	11	"		н	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	102			30-150 %		u	ii	10	*1	Ħ	
2051-24-3	Decachlorobiphenyl (Sr)	113			30-150 <b>%</b>		•	**	*	"		
2051-24-3	Decachlorobiphenyl (Sr) [2C]	92			30-150 %		đ	11	**	17	н	
	sis of Polychlorinated Biphenyls b by method SW846 3540C	y SW846 8082	GS1									
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.652	10	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104880	) X
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.652	10	n	91	н	**		х
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.652	10	•	**	•	n	N	х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.652	10	41	Ħ	41	н	19	х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.652	10	"		п	•	H	х
11097-59-1	Aroclor-1254	48.0		mg/kg dry	0.652	10	10	ч	н	,,	**	Х
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.652	10	19	**	•	**	**	х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.652	10	н	e	**	10		X
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0,652	10	<b>e</b> 1	īŧ	10	н	19	Х
	recoveries:		·									
10386-84-2		145			30-150 %		14	**	n	**	,,	
	4,4-DB-Octafluorobiphenyl (Sr)	130			30-150 % 30-150 %		и	Ħ	11	п		
2051-24-3	[2C] Decachlorobiphenyl (Sr)	135			30-150 %		n	11	15	н	н	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	255	\$GC		30-150 %		н	17		*	"	
General C	hemistry Parameters											
	% Solids	99.6		%		1	SM2540 G Mod.	. 22-Mar-11	1 22-Mar-11	I GMA	110493	3

Sample Id 15-B0 SB25895-	entification 03			<u>t Project #</u> 5.1000.000		<u>Matrix</u> Brick		ection Date -Mar-11 14			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0536	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104880	Х
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0,0536	1	н	*1	•	"	**	X
11141-16-5	Aroclor-1232	BRL	•	mg/kg dry	0.0536	1	17	н	w	**	*	X
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0536	1	н	"	**	**	•	X
12672-29-6	Aroclar-1248	BRL		mg/kg dry	0.0536	1	ч	18	**	**		X
11097-69-1	Aroclor-1254	10.3		mg/kg dry	0.0536	1		н	н	e	н	X
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0536	1	н		**		**	X
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0536	1	"	17	11	н	10	X
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0536	1	"	н		**	"	X
Surrogate	recoveries:					- '						
10386-84-2	4,4-DB-Octafluorobiphenyl (\$r)	115			30-150 %		**	**	0	n	•	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	96		,	30-150 %		п	И	н	w	п	
2051-24-3	Decachlorobiphenyl (Sr)	101			30-150 %		н	17	**	н	н	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	91			30-150 %		41	14	17	er		
General C	hemistry Parameters											
	% Solids	99,9		%		1	SM2540 G Mod.	22-Mar-11	i 22-Mar-11	GMA	1104938	

Sample Id 16-B3 SB25895-	lentification 04			t Project # 5.1000.000		<u>Matrix</u> Brick		ection Date -Mar-11 14			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0535	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104880	X
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0535	1	14	*	н	**	10	X
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0535	1 '	n	"	•	"		Х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0535	1	41	11	10	tı	н	Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0,0535	1	14	"	н	**	**	Х
11097-69-1	Aroclor-1254	0.0800		mg/kg dry	0.0535	1	•	•	**	n		Х
11096-62-5	Arodor-1260	BRL		mg/kg dry	0.0535	1	*	It	10	•	*1	X
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0535	1	N		#	**	**	X
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0535	1	п	4	•	U	11	X
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	123			30-150 %		и	*	и	**	**	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	88			30-150 %		н	Ħ	*1	11	10	
2051-24-3	Decachlorobiphenyl (Sr)	107			30-150 %		40	11*	17	н	н	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	100			30-150 %		н	19	ri	ď	n	
General C	hemistry Parameters											

% Solids

99.7

SM2540 G Mod. 22-Mar-11 22-Mar-11 GMA 1104938

Sample Id 17-B3 SB25895-	entification 05			<u>st Project #</u> 5.1000.000		<u>Matrix</u> Brick	<del></del>	ction Date -Mar-11 14			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0597	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104880	X
11104-28-2	Arocior-1221	BRL		mg/kg dry	0.0597	1	H	10	н	Ħ	"	Х
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0597	1	•		п		**	Х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0597	1		tı	11	u	14	Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0597	1	*	**	n	н	"	Х
11097-69-1	Aroclor-1254	0.0720		mg/kg dry	0.0597	1	u	19	n	el	•	Х
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0,0597	1	*	**	u	#	"	Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0597	1	"	"	10	"	4	X
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0597	1	11	17	н	-	н	х
Surrogate i	ecoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	119			30-150 %		н	н		**	10	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	94			30-150 %		**	ч	19	н	н	
2051-24-3	Decachlorobiphenyl (Sr)	101			30-150 %		st	10	п	"	**	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	109			30-150 %		N	н *		*	10	
General C	hemistry Parameters											
	% Solida	99.9		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104938	3

Sample Id 18-B0 SB25895-	lentification .06		Client Project # 181125.1000.000		<u>Matrix</u> Brick		ection Date -Mar-11 14			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	CerL
Semivolati	le Organic Compounds by GC										
	nated Biphenyls by SW846 8082 by method SW846 3540C										
12674-11-2	Aroclor-1016	BRL	mg/kg dry	0.0599	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104880	X
11104-28-2	Aroclor-1221	BRL	mg/kg dry	0.0599	1	"	It	10	•	н	Х
11141-16-5	Aroclor-1232	BRL	mg/kg dry	0.0599	1	ч	ĸ	н	Ħ		Х
53469-21-9	Aroclor-1242	BRL	mg/kg dry	0.0599	1	47	н	•	15	**	Х
12672-29-6	Aroclor-1248	BRL	mg/kg dry	0.0599	1	**	н	**	и	41	Х
11097-69-1	Aroclor-1254	8,30	mg/kg dry	0.0599	1	n	"	17	н	38	Х
11096-82-5	Aroclor-1260	BRL	mg/kg dry	0.0599	1	н	п	**	н	14	Х
37324-23-5	Aroclor-1262	BRL	mg/kg dry	0.0599	1	н	*	u	*	14	Х
11100-14-4	Aroclor-1268	BRL	mg/kg dry	0.0599	• 1		*	•	•	14	X
Surrogate i	recoveries:									***************************************	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	117		30-150 %		41	n	н	10	н	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	91		30-150 %		19	h	"	11	п	
2051-24-3	Decachlorobiphenyl (Sr)	101		30-150 %		ja.	*	#			
2051-24-3	Decachlorobiphenyl (Sr) [2C]	98		30-150 %		n	"			н	
General C	hemistry Parameters										
	% Solids	99.9	%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104938	

Sample Id 19-B3 SB25895-	entification 07			Project # 5.1000.000		<u>Matrix</u> Brick		ction Date -Mar-11 14			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0594	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104880	Х
11104-28-2	Arodor-1221	BRL		mg/kg dry	0.0594	1	a .	47	11	**	10	X
11141-16-5	Arodor-1232	BRL		mg/kg dry	0.0594	1	n	R	н	н	t#	X
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0594	1			•	н	н	X
12672-29-8	Aroclor-1248	BRL		mg/kg dry	0.0594	1	•	**	#	**	*1	X
11097-89-1	Aroclor-1254	BRL		mg/kg dry	0.0594	1	4	а	н	**	47	х
11096-82-5	Arodor-1260	BRL		mg/kg dry	0.0594	1	π	10	N	ti	10	х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0594	1	11	и	Ħ	н	н	х
11100-14-4	Aroclar-1268	BRL		mg/kg dry	0.0594	1		м	11	"	*	х
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	124			30-150 %		14	n	n	н	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	99			30-150 %		н	н	11	п	и	
2051-24-3	Decachlorobiphenyl (Sr)	112			30-150 %		. "	*1		•	n	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	93			30-150 %		**	11	"	•	e	
General C	hemistry Parameters											
	% Solids	100		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104938	

	entification		Client	Project #		Matrix	Colle	ction Date	/Time	<u>Re</u>	ceived	
<b>20-B0</b> SB25895-	08		181125	.1000.000		Brick	18-	-Mar-11 15	5:03	21-	Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenvis by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0615	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104880	X
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0615	1	•	. "	11	**		X
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0615	1	TF .	. 4	19	19	10	X
53469-21 <del>-9</del>	Arocior-1242	BRL		mg/kg dry	0.0615	1	n	**	н	н	н	Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0615	1		TT .	#	•	•	Х
11097-69-1	Aroclor-1254	0.583		mg/kg dry	0.0615	1	ar .	n	11	11	п	X
11096-82-5	Arodor-1260	BRL		mg/kg dry	0.0615	1	•		"	**	"	X
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0615	1			π	n	*	X
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0,0615	1	и	41				X
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	116			30-150 %		•	н	н	**	**	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	87			30-150 %		10	Ħ	n	"	17	
2051-24-3	Decachlorobiphenyl (Sr)	100			30-150 %		**	**	•	"	M	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	87		ė	30-150 %		47	n	14	41	**	
General C	hemistry Parameters											
	% Solids	99.9		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104938	į.

Sample Id 21-B3 SB25895-	lentification -09			<u>t Project #</u> 5.1000.000		<u>Matrix</u> Brick		ction Date -Mar-11 15			<u>ceived</u> Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC				•							
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg đry	0.0565	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104880	X
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0565	1	•	*	u		47	X
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0565	1	п	19	19	19	**	X
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0565	1			н	*	н	X
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0565	1	•	**		•	н	X
11097-69-1	Arocior-1254	0.422		mg/kg đry	0.0565	1	а	н	*	et	4	X
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0565	1	п	17	19		19	Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0565	1		"		n	н	X
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0565	1	n	н	"	"	"	×
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	130			30-150 %		н	u	19	41	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	98			30-150 %		я	¥ť	H	#6	•	
2051-24-3	Decachlorobiphenyl (Sr)	109			30-150 %		11		**	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	101			30-150 %		19	n	4	n	"	
General C	hemistry Parameters											
	% Solids	99.9		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104938	i

Sample Id 22-B0 \$B25895-	entification 10			Project # 5.1000.000		<u>Matrix</u> Brick		ection Date -Mar-11 15			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Arodor-1016	BRL	•	mg/kg dry	0.0575	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104880	X
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0575	1	**	#	4	н	H	X
<b>11</b> 141-16-5	Arodor-1232	BRL		mg/kg dry	0.0575	1	**	w	н		*	X
53469-21 <del>-9</del>	Aroclor-1242	BRL		mg/kg dry	0.0575	1	11	*	N	**		Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0575	1	н	н	**		19	X
11097-69-1	Aroclor-1254	1.91		mg/kg dry	0.0575	1	ď	n	41	н	*1	X
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0575	1	10	ч	10	"	**	X
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0575	1	19	w	14	4	**	Х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0575	1			н	**	10	. X
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	130			30-150 %		n	91	- 11	п	H	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	99			30-150 %		R	ц	н	n	u	
2051-24-3	Decachlorobiphenyl (Sr)	115			30-150 %			н	н	**	u	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	96			30-150 %		н	•	11			
General C	hemistry Parameters											
	% Solids	99.1		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104938	ļ

Sample Identification
23-B3

Client Project # 181125.1000.000

<u>Matrix</u> Brick Collection Date/Time 18-Mar-11 15:16 Received 21-Mar-11

SB25895-	B25895-11		181125.1000.000		Brick 18-1		-Mar-11 15:16		21-Mar-11		
CAS No.	Analyte(s)	Result	Flag Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC										•
	nated Biphenyls by SW846 8082 by method SW846 3540C										
12674-11-2	Aroclor-1016	BRL	mg/kg dry	0.0540	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104880	X
11104-28-2	Aroclor-1221	BRL	mg/kg dry	0.0540	1	н	н	н		10	X
11141-16-5	Aroclor-1232	BRL	mg/kg dry	0.0540	1	n	*	41	e	н	Х
53469-21-9	Aroclor-1242	BRL	mg/kg dry	0.0540	1	11	н	17	"	н	X
12672-29-6	Aroclor-1248	BRL	mg/kg dry	0.0540	1		•		'n	**	X
11097-69-1	Aroclor-1254	0.315	mg/kg dry	0.0540	1	н	4		н	17	X
11096-82-5	Aroclor-1260	BRL	mg/kg dry	0.0540	1	•	16	**	**	н	X
37324-23-5	Aroclor-1262	BRL	mg/kg dry	0.0540	1	**	н	н	н	4	Х
11100-14-4	Aroclor-1268	BRL	mg/kg dry	0.0540	1	r	u	н	н	41	Х
Surrogate r	ecoveries:										-
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	119		30-150 %		u	н		, 41	и	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	89		30-150 %		41	N	u	н	**	
2051-24-3	Decachlorobiphenyl (Sr)	101		30-150 %		п	π	Ħ	ti	IF	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	81		30-150 %		**	**	**	17		
General C	hemistry Parameters										
	% Solids	99.8	%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104938	3

24-B0	<u>lentification</u>			Client Project # 181125.1000.000				ection Date -Mar-11 15			ceived Mar-11	
SB25895-	-12		10112	.5.1000.000		Brick	10	-1v1a1-11 13		21-	MINI-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082											
	by method SW846 3540C											
12674-11-2		BRL		mg/kg dry	0.0569	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104880	
11104-28-2		BRL		mg/kg dry	0.0569	1	"	"	н	11		Х
11141-16-5	Arodor-1232	BRL		mg/kg dry	0.0569	1	17	n			H	Х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0569	1	"	**	н	п	н	Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0569	1	N	н	#1	н	**	X
11097-69-1	Aroclor-1254	128	٤	mg/kg dry	0.0569	1	н	11	11	н	**	X
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0569	1		u	18	**	47	X
37324-23-5	Araclor-1262	BRL		mg/kg dry	0.0569	1	H	n	IR	49	18	Х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0569	1	11	n	н	10	n	X
Surrogate	recoveries:	· ·										
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	121			30-150 %		**	n	*1		•	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	90			30-150 %		"	п	**	н	н	
2051-24-3	Decachlorobiphenyl (Sr)	103			30-150 %		Ħ	*1	π	н	н	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	91			30-150 %		н	n	JF	п	н	
	sis of Polychlorinated Biphenyls b	y SW846 8082	G\$1									
12674-11-2	by method SW846 3540C	DOL			4.00	400						
		BRL		mg/kg dry	5.69	100	SW846 8082A	21-Mar-11	24-Mar-11	SM "	1104880	
11104-28-2		BRL		mg/kg dry	5.69	100					11	X
11141-16-5	Aroclor-1232	BRL		mg/kg dry	5.69	100	11	п	n		*	X
53469-21-9	Aroclor-1242	BRL		mg/kg dry	5,69	100	19	Ħ	*1	n	4	X
12672-29-6	Aroclor-1248	BRL		mg/kg dry	5.69	100	10	•1	п	н	19	Х
11097-69-1	Aroclor-1254	234		mg/kg dry	5.69	100	и	*1	**	н	11	X
11096-82-5	Aroclor-1260	BRL		mg/kg dry	5.69	100	N	11	**		**	X
37324-23-5	Aroclor-1262	BRL		mg/kg dry	5.69	100	4		"	**	"	X
11100-14-4	Aroclor-1268	BRL		mg/kg dry	5.69	100	н			10	17	X
Surrogate i	recoveries:		-							,		
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	o	S <b>0</b> 1		30-150 %		**	*1	•	н	н	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	0	S01		30-150 %		10	11	**	**	п	
2051-24-3	Decachlorobiphenyl (Sr)	0	S01		30-150 %		11	**	п	11	Ħ	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	0	S01		30-150 %		#		н	*	**	
General C	hemistry Parameters											

99.8

% Solids

SM2540 G Mod. 22-Mar-11 22-Mar-11 GMA 1104938

Sample Identification 25-B3 SB25895-13			Client Project # 181125,1000,000			<u>Matrix</u> Brick	<u>Colle</u> 18	<u>Re</u> 21-				
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0575	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104880	X
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0575	1	н	н		E1	•	X
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0575	1	N	#	, tt	41	11	X
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0575	1	if	•	11		п	X
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0575	1	te	•	14	•	*	X
11097-69-1	Aroclor-1254	0.409		mg/kg dry	0.0575	1	n	Ħ	FF	н	18	X
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0575	1	11	"	10	14	u	X
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0575	1	н	0	н	+	**	Х
11100-14-4	Arodor-1268	BRL		mg/kg dry	0,0575	1	н	**	*1	n	w	x
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	121		,	30-150 %		4	11	н	**		
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	91			30-150 %		н	ÞT	¥ť	11	æ	
2051-24-3	Decachlorobiphenyl (Sr)	102			30-150 %		Ħ		10	n	ti	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	91			30-150 %		п	*	+1	*	*1	
General C	hemistry Parameters											

% Solids

SM2540 G Mod. 22-Mar-11 22-Mar-11 GMA 1104938

Client Project # 181125.1000.000

<u>Matrix</u> Brick Collection Date/Time 18-Mar-11 15:34 Received 21-Mar-11

SB25895-	-14		18112	25.1000.000		Brick	18-	-Mar-11 15	5:34	21-	Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert
 Semivolati	ile Organic Compounds by GC											
	inated Biphenyls by SW846 8082											
	by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0617	1	SW846 8082A		24-Mar-11	SM	1104880	
11104-28-2	Araclor-1221	BRL		mg/kg dry	0.0617	1	н	**	10	*1		X
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0617	1	**		н	14	*	X
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0617	1	ď	11	•	н	4	Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0617	1		Ħ	**	4	47	X
11097-69-1	Aroclor-1254	27.8	E	mg/kg dry	0.0617	1	н		н		н	X
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0617	1	и	19	а	н	н	X
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0617	1		•	•	•	. "	Х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0617	1	Į <b>ė</b>	н	4	•	ır	X
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	138			30-150 %		n	11	n	IF	н	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	102			30-150 %			10	4)		н	
2051-24-3	Decachlorobiphenyl (Sr)	114			30-150 %		IF.	п	17	•		
2051-24-3	Decachlorobiphenyl (Sr) [2C]	104			30-150 %		19	41	H	47	41	
Re-analys	sis of Polychlorinated Biphenyls b	v SW846 808	<u>2</u> GS1									
Prepared	by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.617	10	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104880	) X
11104-26-2	Aroclor-1221	BRL		mg/kg dry	0.617	10	10	•	"	4	**	X
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.617	10	18	*1	10	4	*	Х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.617	10		**	11	#	**	Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.617	10	н		н	Iŧ	10	X
11097-69-1	Aroclor-1254	27.4		mg/kg dry	0.617	10	**	"	**	19	n	X
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.617	10	н .	и	11	н	н	х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.617	10	π	н	B	ŧ	**	X
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0,617	10	19	**	10	4	**	X
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	120			30-150 %		н	IT	*1	н	14	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	110			30-150 %		78	n	п	н	н	
2051-24-3	Decachlorobiphenyl (Sr)	110			30-150 %		14	*1	и	11		
2051-24-3	Decachlorobiphenyl (Sr) [2C]	215	SGC		30-150 %		н	w	н	le	••	
General C	Chemistry Parameters											
	% Solids	99.7		%		1	SM2540 G Mod.	. 22-Mar-11	22-Mar-11	I GMA	1104938	9

Sample Identification 27-B3 SB25895-15			Client Project # 181125.1000.000			<u>Matrix</u> Brick	<u>Colle</u> 18	<u>Re</u> 21-l				
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC		•									
	nated Biphenyls by SW846 8082 by method SW846 3540C							\$				
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0549	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104880	X
11104-28-2	Aroclar-1221	BRL		mg/kg dry	0.0549	1	4	10	н	n	*	Х
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0549	1	'n	•	#1	н	**	Х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0549	1	ч	11	**	**	11	Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0549	1	n	14	u	n	н	Х
11097-69-1	Aroclor-1254	0.0650		mg/kg dry	0.0549	1	и	n	4	ur .	**	Х
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0549	1	**	11		••	14	Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0549	1	»- <b>११</b>	п	н	н	٠,	Х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0549	1	H	\$1	•		п	х
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	129			30-150 %		н		н	н	r	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	97			30-150 %		н	N	**	#1	ıı	
2051-24-3	Decachlorobiphenyl (Sr)	110			30-150 %		w	π	14		44	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	86			30-150 %		10	n	n	7	10	
General C	hemistry Parameters											
	% Solids	99.8		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104938	i

Sample Identification 28-B0 SB25895-16			Client Project # 181125.1000.000			<u>Matrix</u> Brick	<u>Colle</u> 18	<u>Re</u> 21-				
CAS No.	Analyte(\$)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert
Polychlori	le Organic Compounds by GC nated Biphenyls by SW846 8082 by method SW846 3540C					•						
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0606	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104880	х
11104-28-2	Arodor-1221	BRL		mg/kg dry	0.0606	1	#1	"	11	•	. •	Х
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0606	1	**	*	н	•		Х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0606	1	Ħ	H	n	н	•	Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0606	1	ń	**	•	*1		Х
11097-69-1	Araclor-1254	1.47		mg/kg dry	0.0606	1	11	n	It	"	н	X
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0606	1	n	a	н	"	<b>1</b> 0	Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0606	1		10	4	"	н	Х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0606	1	**	ก	18	**	н	Х

30-150 %

30-150 %

30-150 %

30-150 %

SM2540 G Mod. 22-Mar-11 22-Mar-11 GMA 1104938

Surrogate recoveries:

2051-24-3

2051-24-3

10386-84-2 4,4-DB-Octafluorobiphenyl (Sr)

10386-84-2 4,4-DB-Octafluorobiphenyl (Sr)

General Chemistry Parameters % Solids

Decachlorobiphenyl (Sr)

Decachlorobiphenyl (Sr) [2C]

141

106

115

95

99.7

Sample Identification 29-B3 SB25895-17		Client Project # 181125.1000.000			1	<u>Matrix</u> Brick	Collection Date/Time 18-Mar-11 16:00			Received 21-Mar-11		
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Polychlori	le Organic Compounds by GC nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0540	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104880	X
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0540	1	11	4	**	п	н	X
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0540	1	•	Ħ	**	**	ur .	Х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0540	1		10	10	**	**	Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0540	1	•	19	19		н	Х
11097-69-1	Aroclor-1254	0.291		mg/kg dry	0.0540	1	я	н	н	н	н	Х
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0540	1	10	**	77	**	**	Х
37324-23-5	Aroclar-1262	BRL		mg/kg dry	0.0540	1		**	40			Х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0540	1	7		11	н	**	Х
Surrogate	recoveries:									~~~		
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	124			30-150 %		**	*	•	*	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	94			30-150 %		17	**	41	H	н	
2051-24-3	Decachlorobiphenyl (Sr)	107		è	30-150 %		II.	**	#	41	er	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	96			30-150 %			10		*	**	
General C	hemistry Parameters											
	% Solids	99.8		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104941	

Sample Identification 30-B0 SB25895-18		Client Project # 181125.1000.000				<u>Matrix</u> Brick	<u>Colle</u> 18-	<u>Re</u> 21-				
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	CerL
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0495	1	\$W846 8082A	21-Mar-11	24-Mar-11	SM	1104880	Х
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0495	1	**	*	•		н	Х
11141-16-5	Aroclar-1232	BRL		mg/kg dry	0.0495	1	н	и	"	•	н	Х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0495	1	•	H	••	•	н	Х
12872-29-6	Aroclor-1248	BRL		mg/kg dry	0.0495	1	"	н	**	18	**	Х
11097-69-1	Aroctor-1254	2.81		mg/kg dry	0.0495	1	47	π	п			х
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0495	1	10	**	н	н		х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0495	1	n	14	ur .	н	н	. <b>X</b>
11100-14-4	Arocior-1268	BRL		mg/kg dry	0.0495	1	H	н	10	**	"	х
Surrogate i	ecoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	123			30-150 %		**	w	#		. 16	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	94			30-150 %		10	11	н	n	18	
2051-24-3	Decachlorobiphenyl (Sr)	112			30-150 %		te		**	н	14	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	96			30-150 %		19	11	10	n	N	
General C	hemistry Parameters											
	% Solids	99,9		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104941	

Sample Id 31-B3 SB25895-	entification 19			<u>t Project #</u> 5.1000.000		<u>Matrix</u> Brick		ection Date -Mar-11 16			<u>ceived</u> Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0638	1	SW846 8082A	21-Mar-11	23-Mar-11	IMR	1104882	X
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0638	1	Ħ	10	10	н	4	Х
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0,0638	1	п	н		"	"	Х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0638	1	**	u	ri	н	a	Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0638	1	n	-	н	#	"	Х
11097-69-1	Aroclor-1254	0.262		mg/kg dry	0.0638	1	**	11	14	н	Ħ	Х
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0,0638	1	1f	н	н	н	11	Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0638	1		#1		10	tı	Х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0,0638	1	#		11	н	4	X
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	92			30-150 %		4	- "	и		н	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	107			30-150 %		Ħ	н	41	u	"	
2051-24-3	Decachlorobiphenyl (Sr)	114			30-150 %		н	Į4	N	п	4	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	107			30-150 %		te	rı	•	"	"	
General C	Chemistry Parameters											

% Solids

99,9

SM2540 G Mod. 22-Mar-11 22-Mar-11 GMA 1104941

Sample Id 32-B0 SB25895-	<u>lentification</u> 20		-	<u>Project #</u> .1000.000		<u>Matrix</u> Brick		ction Date -Mar-11 16	<del></del> '		ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	lc Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0606	1	SW846 8082A	21-Mar-11	23-Mar-11	IMR	1104882	Х
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0606	1	n	el .	11	41	н	Х
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0606	1	<b>4</b>		*	17	**	Х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0606	1	**	п	н			Х
12672-29-6	Arodor-1248	BRL		mg/kg dry	0.0606	1	*	Ħ	u	*	17	х
11097-69-1	Aroclor-1254	1.90		mg/kg dry	0.0606	1	N	•	•	*		х
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0606	1	н	**	**	п	w	Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0606	1	N	•	и	er	4	Х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0606	1	n	. "	н	16	н	Х
Surrogate i	recoveries:										***	-
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	96			30-150 %		#1	н	·	10	ч	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	111			30-150 %		**	ri	"	#	н	
2051-24-3	Decachlorobiphenyl (Sr)	118			30-150 %		н	#	**	н	41	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	115			30-150 %		"	TP	10		**	
General C	hemistry Parameters											
	% Solids	99.9		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104941	

Sample Id	entification			Project #		<u>Matrix</u> Brick		ction Date			ceived Mar-11	
SB25895-	21		101122	,,1000.000		Ditok	10	-tvian-11 10		21		
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0529	1	SW846 8082A	21-Mar-11	23-Mar-11	IMR	1104882	X
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0529	1	o	н	44	11	н	Χ
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0529	1	Ħ	u		п	н	Χ
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0529	1	*	**	n	4	e	Χ
12672-29-8	Aroclor-1248	BRL	•	mg/kg dry	0.0529	1	и	"	•	и	**	X
11097-69-1	Aroclor-1254	BRL		mg/kg dry	0.0529	1	n	н	10	(I	н	Χ
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0529	1	u	•	н	•	•	Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0529	1	n .	"	#t	44	**	X
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0529	1	n .		11	14		X
Surrogate i	recoveries:									.,, .,,		
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	93			30-150 %		"	11	**	ď	н	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	107			30-150 %		ff	п	*11	4	•	
2051-24-3	Decachlorobiphenyl (Sr)	113			30-150 %		M	n		"	и	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	111			30-150 %		**	41	п	п	н	
General C	hemistry Parameters											
	% Solids	100		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104941	,

Sample Id 34-B0 SB25895-	55895-22		****	<u>Project #</u> .1000.000		<u>Matrix</u> Brick		ection Date -Mar-11 16			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0668	1	SW846 8082A	21-Mar-11	23-Mar-11	IMR	1104882	Х
11104-28-2	Arodor-1221	BRL		mg/kg dry	0.0668	1	P	11	н	и		X
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0668	1	"	и	•	**	47	Х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0668	1	**	Ħ	10	16	te .	Х
12672-29-6	Aroclor-1248 .	BRL		mg/kg dry	0.0668	1	4	"	'n	"	4	Х
11097-69-1	Aroclor-1254	1.34		mg/kg dry	0.0668	1	10		Ħ		Ħ	Х
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0668	1	14	н	**	**	**	х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0,0668	1	и	"	**		19	X
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0668	1	н	47	н	н	н	X
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	94			30-150 %		ь	n		•	41	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	109			30-150 %		н	п	19	19	11	
2051-24-3	Decechlorobiphenyl (Sr)	116			30-150 %		"	11	ŧI	н		
2051-24-3	Decachlorobiphenyl (Sr) [2C]	119			30-150 %		"	19	4	"	м	
General C	hemistry Parameters											

99.7

% Solids

SM2540 G Mod. 22-Mar-11 22-Mar-11 GMA 1104941

Sample Id 35-B3 SB25895-	entification 23			<u>t Project #</u> 5.1000.000		<u>Matrix</u> Brick		ection Date -Mar-11 16			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC		•									
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0525	1	SW846 8082A	21-Mar-11	23-Mar-11	IMR	1104882	X
11104-28-2	Arodor-1221	BRL	•	mg/kg dry	0.0525	1	**	*	u	11	•	Х
11141-16-5	Arodor-1232	BRL		mg/kg dry	0.0525	1		a	**	11	#	X
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0525	1	H	н	49		10	X
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0525	1	•	•	•	н	14	Х
11097-69-1	Aroclor-1254	0.0847		mg/kg dry	0.0525	1	я	. **	н	a	н	Х
11096-82-5	Arodor-1260	BRL		mg/kg dry	0.0525	1	**		н	**	4	х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0525	1	ld .	e	**	R	**	Х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0525	1	п	ч	*		,ª	x
Surrogate i	ecoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	93			30-150 %		41	10	n		19	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	107			30-150 %		н	11	u	н	н	
2051-24-3	Decachiorobiphenyl (Sr)	110			30-150 %		н	н	10		*	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	110			30-150 %		*	*1	*		**	
General C	hemistry Parameters											
·	% Solids	99.8		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104941	

Sample Id 36-B0 SB25895-	entification		***************************************	<u>t Project #</u> 5.1000.000	1	<u>Matrix</u> Brick	· · · · · · · · · · · · · · · · · · ·	ection Date -Mar-11 16			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert
Semivolati	le Organic Compounds by GC		·									
Polychlori	nated Biphenyls by SW846 8082 by method SW846 3540C			•								
12674-11-2	Aroclar-1016	BRL		mg/kg dry	0.0514	1	SW846 8082A	21-Mar-11	23-Mar-11	IMR	1104882	X
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0514	1	u ·	•	n	*	н	X
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0514	1	-	**	**	**	*	Х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0514	1,	u	н	н	16		X
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0514	1	*	н	п	n	10	Х
11097-69-1	Aroclor-1254	2.18		mg/kg dry	0.0514	1	п	Ħ	**	ei	17	Х
11096-82-5	Arodor-1260	BRL		mg/kg dry	0.0514	1	r+	91	10	**	19	X
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0514	1	ti		19	16	п	Х
11100-14-4	Aroclar-1268	BRL		mg/kg dry	0.0514	1	**	"	**		**	X
Surrogate	recoveries:		· · · · · · · · · · · · · · · · · · ·								······	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	98			30-150 %		**	•	•	4		
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	97			30-150 %		N	н	п	"	н	
2051-24-3	Decachlorobiphenyl (Sr)	121			30-150 %		н	н	**	н	u	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	117			30-150 %		n	#	44	41	**	
General C	hemistry Parameters											
	% Solids	99.8		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104941	

Sample Id 37-C3 SB25895-	entification 25			Project # 5.1000.000		<u>Matrix</u> Concrete		ection Date -Mar-11 16			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC		•									
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0666	1	SW846 8082A	21-Mar-11	23-Mar-11	IMR	1104882	Х
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0666	1		**	Ħ	19	"	Х
11141-16-5	Arodor-1232	BRL		mg/kg dry	0.0666	1	н	а	N	н	41	Х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0666	1	u	N	w	*	**	х
12672-29-6	Arocior-1248	BRL		mg/kg dry	0,0666	1	11	#1	**	**	n	Х
11097-69-1	Aroclor-1254	0.305		mg/kg dry	0.0666	1		11	17	**	н	х
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0666	1	19		N	н	н.	х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0,0666	1		n	п	н	**	х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0666	1		н	•	**	"	X
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	98			30-150 %		ч	**	. "	••	11	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	111			30-150 %		17	er	н	u		
2051-24-3	Decachlorobiphenyl (Sr)	120			30-150 %		10	17	7	n	Ħ	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	106			30-150 %		H	н		п	71	
General C	hemistry Parameters											
	% Solids	99.2		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104941	

Sample Identification 38-C0 SB25895-26				<u>t Project #</u> 5.1000.000	ŀ	<u>Matrix</u> Concrete		ection Date -Mar-11 16			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											-
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg đry	0.0666	1	SW846 8082A	21-Mar-11	24-Mar-11	IMR	1104882	Х
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0666	1		н	Ħ		91	Х
11141-16-5	Aroclor-1232	BRL		mg/kg đry	0.0666	1	н	e	**	**	16	Х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0666	1	n	н	**	"	10	Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0,0666	1	rt.	46	11	10	19	Х
11097-69-1	Aroclor-1254	8.77		mg/kg dry	0.0666	1	**	"	4	14	•	х
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0,0666	1	40	н	н	н	и	Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0666	1	10	н	н	ıı	н	Х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0666	1	"	н	n	· "	n	х
Surrogate i	recoveries:									*******		
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	100			30-150 %		н	**	11	*1	¥1	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	117			30-150 %		и	u	76	M		
2051-24-3	Decachlorobiphenyl (Sr)	128			30-150 %		•	**	10	*1		
2051-24-3	Decachlorobiphenyl (Sr) [2C]	120			30-150 %		н	u	40	ur	н	
General C	hemistry Parameters											
	% Solids	98.5		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104941	

nalyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limi
ntch 1104880 - SW846 3540C										
Blank (1104880-BLK1)					Pn	epared: 21-	Mar-11 An	alyzed: 24-M	lar-11	
Arodor-1016	BRL		mg/kg wet	0.0667						
Aroclor-1016 [2C]	BRL		mg/kg wet	0.0667						
Aroclor-1221	BRL		mg/kg wet	0.0667						
Aroclor-1221 [2C]	BRL		mg/kg wet	0.0667						
Aroclor-1232	BRL		mg/kg wet	0.0667						
Aroclor-1232 [2C]	BRL		mg/kg wet	0.0667						
Arodor-1242	BRL		mg/kg wet	0.0667						
Aroclor-1242 [2C]	BRL		mg/kg wet	0.0667						
Aroclor-1248	BRL		mg/kg wet	0.0667						
Arodor-1248 [2C]	BRL		mg/kg wet	0.0667						
Arodor-1254	BRL		mg/kg wet	0.0667						
Arodor-1254 [2C]	BRL		mg/kg wet	0.0667						
Arodor-1260	BRL		mg/kg wet	0.0667						
Aroclor-1260 [2C]	BRL		mg/kg wet	0.0667						
Aroclor-1262	BRL		mg/kg wet	0.0667						
Arodor-1262 [2C]	BRL		mg/kg wet	0.0667						
Aroclor-1268	BRL		mg/kg wet	0.0667						
Aroclor-1268 [2C]	BRL		mg/kg wet	0.0667						
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	0.0997		mg/kg wet		0.0667		150	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.0810		mg/kg wet		0.0667		122	30-150		
Surrogate: Decachlorobiphenyl (Sr)	0.0880		mg/kg wet		0.0667		132	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	0.0820		mg/kg wet		0.0667		123	30-150		
LCS (1104880-BS1)					<u>Pr</u>	epared: 21-	Mar-11 Ar	alyzed: 24-N	/ar-11	
Aroclor-1016	0.778		mg/kg wet	0.0667	0.833		93	50-140		
Aroclor-1016 [2C]	0.784		mg/kg wet	0.0667	0.833		94	50-140		
Aroclor-1260	0.759		mg/kg wet	0.0667	0.833		91	50-140		
Arodor-1260 [2C]	0.829		mg/kg wet	0.0667	0.833		99	50-140		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	0.0677		mg/kg wet		0.0667		102	30-150		*
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.0623		mg/kg wet		0.0667		94	30-150		
Surrogate: Decachlorobiphenyl (Sr)	0.0697		mg/kg wet		0.0667		105	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	0.0730		mg/kg wet		0.0667		110	30-150		
LCS Dup (1104880-BSD1)	0.0700		mg/kg trot			anaradi 21		nalyzed: 24-N	Anc 11	
Aroclor-1016	0.742		mg/kg wet	0.0667	0.8 <b>3</b> 3	epareu. Z I-	89	50-140		30
Aroclor-1016 [2C]	0.742		mg/kg wet	0.0667	0.833		90	50-140 50-140	. 5 5	30
Aroclor-1260	0.707		mg/kg wet	0.0667	0.833		85	50-140	7	30
Aroclor-1260 [2C]	0.788		mg/kg wet	0.0667	0.833		95	50-140	5	30
	<del> </del>			0.0007						
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	0.0653		mg/kg wet		0.0667		98	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.0600		mg/kg wet		0.0667		90	30-150		
Surrogate: Decachlorobiphenyl (Sr)	0.0660		mg/kg wet		0.0667		99	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	0.0617		mg/kg wet		0,0667		92	30-150	_	
Duplicate (1104880-DUP1)			Source: SB		<u>P</u> 1		Mar-11 Ar	nalyzed: 24-N	Mar-11	
Aroclor-1016	BRL		mg/kg dry	0.0560		BRL				40
Aroclor-1016 [2C]	BRL		mg/kg dry	0.0560		BRL				40
Aroclor-1221	BRL		mg/kg dry	0.0560		BRL				40
Aroclor-1221 [2C]	BRL		mg/kg dry	0.0560		BRL				40
Aroclor-1232	BRL		mg/kg dry	0.0560		BRL				40
Araclor-1232 [2C]	BRL		mg/kg dry	0,0560		BRL				40
Arodor-1242	BRL		mg/kg dry	0.0560		BRL				40
Aroclor-1242 [2C]	BRL		mg/kg dry	0.0560		BRL				40
Aroclor-1248	BRL		mg/kg dry	0.0560		BRL				40

nalyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPĎ Limit
atch 1104880 - SW846 3540C							,			
Duplicate (1104880-DUP1)			Source: SB	25895-01	Pne	pared: 21-	Mar-11 An	alyzed: 24-N	Mar-11	
Aroclor-1248 [2C]	BRL		, mg/kg dry	0,0560		BRL				40
Aroclor-1254	0.263	QM4	mg/kg dry	0.0560		0.661			86	40
Aroclor-1254 [2C]	0.313	QM4	mg/kg dry	0.0560		0.657			71	40
Aroclor-1260	BRL		mg/kg dry	0.0560		BRL				40
Aroclor-1260 [2C]	BRL		mg/kg dry	0.0560		BRL				40
Aroclor-1262	BRL		mg/kg dry	0.0560		BRL				40
Aroclor-1262 [2C]	BRL		mg/kg dry	0.0560		BRL				40
Aroclor-1268	BRL		mg/kg dry	0.0560		BRL				40
Aroclor-1268 [2C]	BRL		mg/kg dry	0.0560		BRL				40
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	0.0730		mg/kg dry		0.0560		131	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.0562		mg/kg dry		0.0560		101	30-150		
Surrogate: Decachlorobiphenyl (Sr)	0.0585		mg/kg dry		0.0560		105	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	0.0532		mg/kg dry		0.0560		95	30-150		
Matrix Spike (1104880-MS1)			Source: SB	25895-01		epared: 21		nalyzed: 24-l	vlar-11	
Aroclor-1016	0.664		mg/kg dry	0.0630	0.788	BRL	84	40-135	*****	
Aroclor-1016 [2C]	0.674		mg/kg dry	0.0630	0.788	BRL	86	40-135		
Aroclor-1260	0.716		mg/kg dry	0.0630	0.788	BRL	91	40-135		
Aroclor-1260 [2C]	0.759		mg/kg dry	0.0630	0.788	BRL	96	40-135		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	0.0577		mg/kg dry		0.0630		92	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.0529		mg/kg dry		0.0630		84	30-150		
Surrogate: Decachlorobiphenyl (Sr)	0.0596		mg/kg dry		0.0630		94	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	0.0529		mg/kg dry		0.0630		84	30-150		
Matrix Spike Dup (1104880-MSD1)			Source: SB	25895-01		enared: 21		nalyzed: 24-l	Mar-11	
Aroclor-1016	0.718		mg/kg dry	0.0648	0.811	BRL	89	40-135	5	30
Aroclor-1016 [2C]	0.737		mg/kg dry	0.0648	0.811	BRL	91	40-135	6	30
Aroclor-1260	0.743		mg/kg dry	0.0648	0,811	BRL	92	40-135	1	30
Aroclor-1260 [2C]	0.844		mg/kg dry	0.0648	0.811	BRL	104	40-135	8	30
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	0.0655		mg/kg dry		0.0648		101	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.0597		mg/kg dry		0.0648		92	30-150		
Surrogate: Decachlorobiphenyl (Sr)	0.0668		mg/kg dry		0.0648		103	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	0.0616		mg/kg dry		0.0648		95	30-150		
atch 1104882 - SW846 3540C			,							
Blank (1104882-BLK1)					Pr	epared: 21	-Mar-11, Ar	nalyzed: 23-l	Mar-11	
Aroclor-1016	BRL		mg/kg wet	0.0200						
Aroclor-1016 [2C]	BRL		mg/kg wet	0.0200						
Aroclor-1221	BRL		mg/kg wet	0.0200						
Aroclor-1221 [2C]	BRL		mg/kg wet	0.0200						
Aroclor-1232	BRL		mg/kg wet	0.0200						
Aroclor-1232 [2C]	BRL		mg/kg wet	0.0200						
Aroclor-1242	BRL		mg/kg wet	0,0200						
Aroclor-1242 [2C]	BRL		mg/kg wet	0.0200						
Aroclor-1248	BRL		mg/kg wet	0.0200						
Aroclor-1248 [2C]	BRL		mg/kg wet	0.0200						
Arodor-1254	BRL		mg/kg wet	0.0200						
Arodor-1254 [2C]	BRL		mg/kg wet	0.0200						
Aroclor-1260	BRL		mg/kg wet	0.0200						
Araclor-1260 [2C]	BRL		mg/kg wet	0.0200						
Aroclor-1262	BRL		mg/kg wet	0.0200						
Aroclor-1262 [2C]	BRL		mg/kg wet	0.0200						
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ialyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
tch 1104882 - SW846 3540C										
Blank (1104882-BLK1)					Pre	pared: 21-	Mar-11 An	alyzed: 23-M	lar-11	
Aroclor-1268 [2C]	BRL		mg/kg wet	0.0200						
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	0.0194		mg/kg wet	· · · · · · · · · · · · · · · · · · ·	0.0200		97	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.0218		mg/kg wet		0.0200		109	30-150		
Surrogate: Decachlorobiphenyl (Sr)	0.0255		mg/kg wet		0.0200		128	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	0.0211		mg/kg wet		0.0200		106	30-150		
LC\$ (1104882-B\$1)					Pro	epared: 21-	Mar-11 An	alyzed: 23-M	far-11	
Aroclor-1016	0.217		mg/kg wet	0.0200	0,250		87	50-140		
Aroclor-1016 [2C]	0.228		mg/kg wet	0.0200	0,250		91	50-140		
Aroclor-1260	0.221		mg/kg wet	0.0200	0.250		89	50-140		
Arodor-1260 [2C]	0.210		mg/kg wet	0.0200	0.250		84	50-140		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	0.0218		mg/kg wet		0.0200		109	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.0228		mg/kg wet		0.0200		114	30-150		
Surrogate: Decachlorobiphenyl (Sr)	0.0248		mg/kg wet		0.0200		124	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	0.0236		mg/kg wet		0.0200		118	30-150		
LCS Dup (1104882-BSD1)					Pr	epared: 21-	-Mar-11 Ar	nalyzed: 23-N	/lar-11	
Aroclor-1016	0.234		mg/kg wet	0.0200	0.250		94	50-140	8	30
Aroclor-1016 [2C]	0.231		mg/kg wet	0.0200	0,250		93	50-140	1	30
Aroclor-1260	0,216		mg/kg wet	0.0200	0.250		86	50-140	3	30
Aroclor-1260 [2C]	0.224		mg/kg wet	0.0200	0.250		90	50-140	6	30
Surrogete: 4,4-DB-Octafluorobiphenyl (Sr)	0.0226		mg/kg wet		0.0200		113	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.0233		mg/kg wet		0.0200		117	30-150		
Surrogate: Decachlorobiphenyl (Sr)	0.0259		mg/kg wet		0.0200		130	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2G]	0.0240		mg/kg wet		0.0200		120	30-150		
Duplicate (1104882-DUP1)			Source: SB	25895-19	Pr	epared: 21	-Mar-11 Ar	nalyzed: 24-N	Mar-11	
Aroclor-1016	BRL		mg/kg dry	0.0627		BRL	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			40
Aroclor-1016 [2C]	BRL		mg/kg dry	0.0627		8RL				40
Aroclor-1221	BRL		mg/kg dry	0.0627		BRL				40
Aroclor-1221 [2C]	BRL		mg/kg dry	0.0627		BRL				40
Aroclor-1232	BRL		mg/kg dry	0.0627		BRL				40
Aroclor-1232 [2C]	BRL		mg/kg dry	0.0627		BRL				40
Arodor-1242	BRL		mg/kg dry	0.0627		BRL				40
Arodor-1242 [2C]	BRL		mg/kg dry	0.0627		BRL				40
Arocior-1248	BRL		mg/kg dry	0.0627		BRL				40
Aroclor-1248 [2C]	BRL		mg/kg dry	0.0627		BRL				40
Aroclor-1254	0.219		mg/kg dry	0.0627		0,262			18	40
Aroclor-1254 [2C]	0.213		mg/kg dry	0.0627		0.233			9	40
Aroclor-1260	BRL		mg/kg dry	0.0627		BRL				40
Aroclor-1260 [2C]	BRL		mg/kg dry	0.0627		BRL				40
Aroclar-1262	BRL		mg/kg dry	0.0627		BRL				40
Aroclor-1262 [2C]	BRL		mg/kg dry	0.0627		BRL				40
Aroclor-1268	BRL		mg/kg dry	0.0627		BRL				40
Aroclor-1268 [2C]	BRL		mg/kg dry	0.0627		BRL				40
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	0.0580		mg/kg dry		0.0627		92	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.0659		mg/kg dry		0.0627		105	30-150		
Surrogate: Decachlorobiphenyi (Sr)	0.0665		mg/kg dry		0.0627		106	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	0.0718		mg/kg dry		0.0627		115	30-150		
Matrix Spike (1104882-M\$1)			Source: SB	25895-19	<u>P</u> ı	epared: 21	-Mar-11 A	nalvzed: 23-	Mar <u>-11</u>	
Arodor-1016	0.669		mg/kg dry	0.0631	0.789	BRL	85	40-135		
Aroclor-1016 [2C]	0.761		mg/kg dry	0.0631	0.789	BRL	96	40-135		
Arodor-1260	0.712		mg/kg dry	0.0631	0.789	BRL	90	40-135		

nalyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPI Limi
satch 1104882 - SW846 3540C										
Matrix Spike (1104882-MS1)			Source: SB	25895-19	<u>Pr</u>	epared: 21-	Mar-11 An	alyzed: 23-M	lar-11	
Aroclor-1260 [2C]	0.705		mg/kg dry	0.0631	0,789	BRL	89	40-135		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	0.0618		mg/kg dry	• • •	0.0631		98	30-150		·
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.0669		mg/kg dry		0.0631		106	30-150		
Surrogate: Decachlorobiphenyl (Sr)	0.0704		mg/kg dry		0.0631		112	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	0.0694		mg/kg dry		0.0631		110	30-150		
Matrix Spike Dup (1104882-MSD1)			Source: SB	25895-19	Pre	epared: 21-	Mar-11 An	alyzed: 23-N	far-11	
Aroclor-1016	0.597		mg/kg dry	0.0599	0.749	BRL	80	40-135	6	30
Aroclor-1016 [2C]	0.700		mg/kg dry	0.0599	0.749	BRL	93	40-135	3	30
Aroclor-1260	0.618		mg/kg dry	0.0599	0.749	BRL	82	40-135	9	30
Aroclor-1260 [2C]	0.633		mg/kg dry	0.0599	0.749	BRL	84	40-135	6	30
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	0.0563		mg/kg dry		0.0599		94	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.0632		mg/kg dry		0.0599		106	30-150		
Surrogate: Decachlorobiphenyl (Sr)	0.0635		mg/kg dry		0.0599		106	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	0.0632		mg/kg dry		0.0599		106	30-150		

## General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1104941 - General Preparation										
Duplicate (1104941-DUP1)			Source: SI	325895-17	<u>Pn</u>	epared & A	nalyzed: 22	<u>-Mar-11</u>		
% Solids	99.5		%			99.8			0.3	20

#### **Notes and Definitions**

E	The concentration indicated for this analyte is an estimated value. This value is considered an estimate (CLP E-flag).
GS1	Sample dilution required for high concentration of target analytes to be within the instrument calibration range.
QM4	Visual evaluation of the sample indicates the RPD is above the control limit due to a non-homogeneous sample matrix.
S01	The surrogate recovery for this sample is not available due to sample dilution required from high analyte concentration and/or matrix interference's.
SGC	Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.
BRL	Below Reporting Limit - Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
NR	Not Reported
מפס	Relative Percent Difference

RPD Relative Percent Difference

A plus sign (+) in the Method Reference column indicates the method is not accredited by NELAC.

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Continuing Calibration Verification: The calibration relationship established during the initial calibration must be verified at periodic intervals. Concentrations, intervals, and criteria are method specific.

> Validated by: June O'Connor Rebecca Merz

# Reasonable Confidence Protocols Laboratory Analysis QA/QC Certification Form

Laboratory Name: Spectrum Analytical, Inc.

Client: TRC - Windsor, CT

Project Location: Quirk Middle School - Hartford, CT

Project Number: 181125.1000.000

Sampling Date(s):

3/18/2011

Laboratory Sample ID(s):

SB25895-01 through SB25895-26

**RCP Methods Used:** 

SW846 8082A

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence Protocol documents?	✓ Yes	No
1A	Were the method specified preservation and holding time requirements met?	✓ Yes	No
1B	<u>VPH and EPH methods only</u> : Was the VPH or EPH method conducted without significant modifications (see Section 11.3 of respective RCP methods)?	Yes	No
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	✓ Yes	No
3	Were samples received at an appropriate temperature?	✓ Yes	No
4	Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved?	Yes	✓ No
5	a) Were reporting limits specified or referenced on the chain-of-custody? * b) Were these reporting limits met?  * Exceptions are defined by qualifiers	Yes Yes	✓ No No
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	✓ Yes	No
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	✓ Yes	No

Note: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet the requirements for "Reasonable Confidence."

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for obtaining the information contained in this analytical report, such information is accurate and complete.

Nicole Leja Laboratory Director

Date: 3/24/2011

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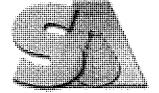
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		Report and «Grown reportable limit predict
		Report and Chum reportable limit prodect
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		ALP Report and Aroom reportable limit predec
		RLP Report and 4 fepting reportable limit prodect
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AN TARREST					0.8 m vsc		Crimer BIS. String W.C.	THE STATE OF THE S			
OF CUSTOMY	PARAMETERS	Green) to									
CHAIN		KRPRETION militer Prehisa de Militer Koo	SAMPLE COCATION			X. december	Service Districting			e. In reportative See to resided	
CTRUTEROND FORTH.  VESTISOR, CONSECUTORION  TELEFORMAL (NO.) 788-260.  FAX. (NO.) 216-330.  FAX. (NO.) 216-330.  FAX. (NO.) 216-330.	# 1 E		PARTIES MOTE TIME S		1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	118 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			1451 16841 1634 18.Cc 30841 1638	ila. TROP Reportanti	

Surface cover 1-50

Report Date: 24-Mar-11 15:02



SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

☑ Final Report☐ Re-Issued Report☐ Revised Report

Project: Quirk Middle School - Hartford, CT

Project #: 181125.1000.0000

TRC
21 Griffin Road North
Windsor, CT 06095
Attn: Jen Peshka

Laboratory ID	Client Sample ID	<u>Matrix</u>	Date Sampled	Date Received
SB25773-01	01-Soil	Soil	15-Mar-11 11:31	17-Mar-11 15:25
SB25773-02	02-SC	Asphalt	15-Mar-11 11:32	17-Mar-11 15:25
SB25773-03	03-SC	Asphalt	15-Mar-11 11:40	17-Mar-11 15:25
SB25773-04	04-SC	Asphalt	15-Mar-11 11:50	17-Mar-11 15:25
SB25773-05	05-SC -	Asphalt	15-Mar-11 11:34	17-Mar-11 15:25
SB25773-06	06-SC	Concrete	15-Mar-11 11:07	17-Mar-11 15:25
SB25773-07	07-SC	Concrete	15-Mar-11 11:14	17-Mar-11 15:25
SB25773-08	08-SC	Asphalt	15-Mar-11 12:00	17-Mar-11 15:25
SB25773-09	09-SC .	Asphalt	15-Mar-11 12:07	17-Mar-11 15:25
SB25773-10	10-SC	Asphalt Asphalt	15-Mar-11 12:09	17-Mar-11 15:25
SB25773-11	11-SC	Asphalt Anghor	15-Mar-11 12:12	17-Mar-11 15:25
SB25773-12	12-SC	Asphalt Apple	15-Mar-11 12:14	17-Mar-11 15:25
SB25773-13	13-SC	Asphalt	15-Mar-11 00:00	17-Mar-11 15:25
SB25773-14	14-SC	Asphalt	15-Mar-11 00:00	17-Mar-11 15:25
SB25773-15	15-SC	Concrete	15-Mar-11 00:00	17-Mar-11 15:25
SB25773-16	16-SC	Concrete	15-Mar-11 00:00	17-Mar-11 15:25
SB25773-17	17-SC	Concrete	15-Mar-11 00:00	17-Mar-11 15:25
SB25773-18	18-SC	Concrete	15-Mar-11 00:00	17-Mar-11 15:25
SB25773-19	19-SC	Concrete	15-Mar-11 00:00	17-Mar-11 15:25
SB25773-20	20-SC	Concrete	15-Mar-11 00:00	17-Mar-11 15:25
SB25773-21	21-SC	Concrete	15-Mar-11 00:00	17-Mar-11 15:25
SB25773-22	22-SC	Concrete	15-Mar-11 00:00	17-Mar-11 15:25
SB25773-23	23-SC	Concrete	15-Mar-11 00:00	17-Mar-11 15:25
SB25773-24	24-SC	Soil	15-Mar-11 00:00	17-Mar-11 15:25
SB25773-25	25-SC	Asphalt	15-Mar-11 00:00	17-Mar-11 15:25
SB25773-26	26-SC	Asphalt	15-Mar-11 00:00	17-Mar-11 15:25
SB25773-27	27-SC	Soil	15-Mar-11 00:00	17-Mar-11 15:25
SB25773-28	28-SC	Soil	15-Mar-11 00:00	17-Mar-11 15:25
SB25773-29	29-SC	Concrete	15-Mar-11 00:00	17-Mar-11 15:25
SB25773-30	30-SC	Concrete	15-Mar-11 00:00	17-Mar-11 15:25
SB25773-31	31-SC	Concrete	15-Mar-11 00:00	17-Mar-11 15:25
SB25773-32	32-SC	Concrete	15-Mar-11 00:00	17-Mar-11 15:25
SB25773-33	33-SC	Concrete	15-Mar-11 00:00	17-Mar-11 15:25
SB25773-34	34-SC	Concrete	15-Mar-11 00:00,	17-Mar-11 15:25
SB25773-35	35-SC	Concrete	15-Mar-11 00:00	17-Mar-11 15:25
SB25773-36	36-SC	Concrete	15-Mar-11 00:00	17-Mar-11 15:25
SB25773-37	37-SC	Concrete	15-Mar-11 00:00	17-Mar-11 15:25

SB25773-38	38-SC	Concrete	15-Mar-11 00:00	17-Mar-11 15:25
SB25773-39	39-SC	Concrete	15-Mar-11 00:00	17-Mar-11 15:25
SB25773-40	40-SC	Asphalt	15-Mar-11 00:00	17-Mar-11 15:25
SB25773-41	41-SC	Asphalt	15-Mar-11 00:00	17-Mar-11 15:25
SB25773-42	42-SC	Asphalt	15-Mar-11 00:00	17-Mar-11 15:25
SB25773-43	43-SC .	Asphalt	15-Mar-11 00:00	17-Mar-11 15:25
SB25773-44	44-SC	Asphalt	15-Mar-11 00:00	17-Mar-11 15:25
SB25773-45	45-SC	Asphalt	15-Mar-11 00:00	17-Mar-11 15:25
SB25773-46	46-SC	Asphalt	15-Mar-11 00:00	17-Mar-11 15:25
SB25773-47	47-SC	Asphalt	15-Mar-11 00:00	17-Mar-11 15:25
SB25773-48	48-SC	Concrete	15-Mar-11 00:00	17-Mar-11 15:25
SB25773-49	49-SC	Concrete	15-Mar-11 00:00	17-Mar-11 15:25
SB25773-50	50-SC	Concrete	15-Mar-11 00:00	17-Mar-11 15:25

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.

All applicable NELAC requirements have been met.

Massachusetts # M-MA138/MA1110 Connecticut # PH-0777 Florida # E87600/E87936 Maine # MA138 New Hampshire # 2538 New Jersey # MA011/MA012 New York # 11393/11840 Pennsylvania # 68-04426/68-02924 Rhode Island # 98 USDA # S-51435



Authorized by:

Nicole Leja Laboratory Director

Nicole Leja

Spectrum Analytical holds certification in the State of New York for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of New York does not offer certification for all analytes.

Please note that this report contains 62 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Spectrum Analytical, Inc.

Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Spectrum is currently accredited for the specific method or analyte indicated. Please refer to our "Quality" web page at www.spectrum-analytical.com for a full listing of our current certifications and fields of accreditation. States in which Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey and Florida, All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (NY-11840, FL-E87936 and NJ-MA012).

#### CASE NARRATIVE:

The sample temperature upon receipt by Spectrum Analytical courier was recorded as 10.3 degrees Celsius. The condition of these samples was further noted as refrigerated. The samples were transported on ice to the laboratory facility and the temperature was recorded at 3.5 degrees Celsius upon receipt at the laboratory. Please refer to the Chain of Custody for details specific to sample receipt times.

An infrared thermometer with a tolerance of +/- 2.0 degrees Celsius was used immediately upon receipt of the samples.

If a Matrix Spike (MS), Matrix Spike Duplicate (MSD) or Duplicate (DUP) was not requested on the Chain of Custody, method criteria may have been fulfilled with a source sample not of this Sample Delivery Group.

Required site-specific Matrix Spike/Matrix Spike Duplicate (MS/MSD) must be requested by the client and sufficient sample must be submitted for the additional analyses. Samples submitted with insufficient volume/weight will not be analyzed for site specific MS/MSD, however a batch MS/MSD may be analyzed from a non-site specific sample.

CTDEP has published a list of analytical methods which provides a series of recommended protocols for the acquisition, analysis and reporting of analytical data in support of decisions being made utilizing the Reasonable Confidence Protocol (RCP). "Reasonable Confidence" can be established only for those methods published by the CTDEP in the RCP guidelines. The compounds and/or elements reported were specifically requested by the client on the Chain of Custody and in some cases may not include the full analyte list as defined in the method. Regulatory limits may not be achieved if specific method and/or technique was not requested on the Chain of Custody.

The CTDEP RCP requests that "all non-detects and all results below the reporting limit are reported as ND (Not Detected at the Specified Reporting Limit)". All non-detects and all results below the reporting limit are reported as "BRL" (Below the Reporting Limit) in this report.

If no reporting limits were specified or referenced on the chain-of-custody the laboratory's practical quantitation limits were applied.

Tetrachloro-m-xylene is recommended as a surrogate by the CTDEP RCP for the following SW846 Methods 8081, 8082 and 8151. Spectrum Analytical, Inc. uses Tetrachloro-m-xylene as the Internal Standard for these methods and Dibromooctaflourobiphenyl as the surrogate.

See below for any non-conformances and issues relating to quality control samples and/or sample analysis/matrix.

#### SW846 8082A

#### Laboratory Control Samples:

#### 1104688 BSD

Aroclor-1016 RPD 33% (30%) is outside individual acceptance criteria, but within overall method allowances.

Aroclor-1260 RPD 32% (30%) is outside individual acceptance criteria, but within overall method allowances.

#### 1104688-BSD1

The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.

Aroclor-1016 Aroclor-1260

#### Samples:

S102036-CCV2

#### SW846 8082A

#### Samples:

### S102036-CCV2

Analyte percent difference is outside individual acceptance criteria (15), but within overall method allowances.

Aroclor-1221 (4) [2C] (-15.8%)

Aroclor-1221 (5) (17.8%)

Aroclor-1262 (1) (16.3%)

Aroclor-1262 (3) [2C] (-18.9%)

Aroclor-1262 (4) [2C] (-18.0%)

Aroclor-1262 (5) [2C] (-21.4%)

This affected the following samples:

50-SC

SB25773-11

11-SC

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

Decachiorobiphenyl (Sr) [2C]

SB25773-12

12-SC

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

Decachlorobiphenyl (Sr) [2C]

SB25773-25

25-SC

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

Decachlorobiphenyl (Sr) [2C]

SB25773-26

26-SC

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

Decachlorobiphenyl (Sr) [2C]

SB25773-29

29-SC

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

4,4-DB-Octafluorobiphenyl (Sr)

Sample Identification 01-Soil SB25773-01		<u>Client Project #</u> 181125.1000.0000			0	<u>Matrix</u> Soil	Collection Date/Time 15-Mar-11 II:31			Received 17-Mar-11			
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	CerL	
Semivolati	lc Organic Compounds by GC												
	nated Biphenyls by SW846 8082 by method SW846 3540C		•										
12674-11-2	Aroclor-1016	BRL		μg/kg dry	25,6	1	SW846 8082A	17-Mar-11	24-Mar-11	IMR	1104683	X	
11104-28-2	Arodor-1221	BRL		μg/kg dry	25,6	1	п	**		"	н	X	
11141-16-5	Aroclor-1232	BRL		µg/kg dry	25.6	1	**	*		N	14	X	
53469-21-9	Arodor-1242	BRL		µg/kg dry	25.6	1	**	10		н	*	Х	
12672-29-6	Aroclor-1248	BRL		μg/kg dry	25,6	1	**	*	M	"	#	Х	
11097-69-1	Aroclor-1254	697		µg/kg dry	25.6	1	17	**	н	44	**	X	
11096-82-5	Aroclor-1260	BRL		µg/kg dry	25,6	1	u	#	•	Ħ	14	Х	
37324-23-5	Aroclor-1262	BRL		µg/kg dry	25.6	1	н	44	**	"		X	
11100-14-4	Aroclor-1268	BRL		µg/kg dry	25,6	1	đ	6	u	н	н	X	
Surrogate i	ecoveries:												
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	98			30-150 %		10	*	н	•	•		
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	92			30-150 %		10	**	M	4f	#1		
2051-24-3	Decachlorobiphenyl (Sr)	91			30-150 %		и	"	16		19		
2051-24-3	Decachlorobiphenyl (Sr) [2C]	70			30-150 %		н	"	1E	•	10		
General C	hemistry Parameters												
	% Solids	77.4		%		1	SM2540 G Mod.	17-Mar-11	17-Mar-11	BD	1104696		

Sample Identification  02-SC  SB25773-02		Client Project # 181125.1000.0000		<u>Matrix</u> Asphalt	Collection Date/Time 15-Mar-11 11:32			<u>Received</u> 17-Mar-11				
CAS No.	Analyte(s)	Resuit	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	20.7	1	SW846 8082A	17-Mar-11	24-Mar-11	IMR	1104683	Х
11104-28-2	Aroclor-1221	BRL		μg/kg dry	20.7	1	н	16	n	18	Ħ	Χ
11141-16-5	Aroclor-1232	BRL		µg/kg dry	20.7	1	**	н	11		11	Х
53469-21-9	Aroclor-1242	BRL		µg/kg dry	20.7	1	•	<b>E</b> 1	ŧI	(4	14	Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	20.7	1	"	11	#	н	14	X
11097-69-1	Aroclor-1254	62.1		µg/kg đry	20.7	1	н	н	11	11	и	Х
11096-82-5	Aroclor-1260	BRL		μg/kg đry	20.7	1	п	н	н	lf	și.	Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	20.7	1	**		<b>w</b>	н	**	Х
11100-14-4	Aroclor-1268	BRL		µg/kg dry	20.7	1	10	47	11	н	и	X
Surrogate r	recoveries:						,					
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	96			30-150 %		и	п	"	16	स	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	110			30-150 %		**	**	н	н	Ħ	
2051-24-3	Decachlorobiphenyl (Sr)	68			30-150 %		Iŧ	10	. 11	н	и	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	78			30-150 %		н	н		u	"	
General C	hemistry Parameters											
	% Solids	94.5		%		1	SM2540 G Mod.	17-Mar-11	17-Mar-11	BD	1104696	

03-SC	Sample Identification 03-SC SB25773-03		181125.1000.0000		<u>Matrix</u> Asphalt		ction Date Mar-11 11		<u>Re</u> 17-1			
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	20.7	1	SW846 8082A	17-Mar-11	24-Маг-11	IMR	1104683	Х
11104-28-2	Aroctor-1221	BRL		μg/kg dry	20.7	1	#	н	71	**	n	Х
11141-16-5	Aroclor-1232	BRL		µg/kg dry	20.7	1	н	lę .	lt*	11	"	Х
53469-21-9	Arocior-1242	BRL		μg/kg dry	20.7	1	**	"	*	n	•	Х
12672-29-6	Aroclor-1248	BRL		µg/kg dry	20.7	1	н	**	11	#	н	Х
11097-69-1	Aroclor-1254	77.4		µg/kg dry	20.7	1	n	n	**	*	*	Х
11096-82-5	Aroclor-1260	BRL		μg/kg dry	20.7	1	ŧI	H	н	II.	14	X
37324-23-5	Aroclor-1262	BRL		μg/kg dry	20.7	1	17	a	11	11	-	X
11100-14-4	Aroclor-1268	BRL		μg/kg dry	20.7	1	н	n	II.	11	"	Х
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (St)	89			30-150 %		IF	15	11	**	м	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	101	•		30-150 %		a	11			**	
2051-24-3	Decachlorobiphenyl (Sr)	69			30-150 %		**	4	41	**	(1	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	69			30-150 %		н	tr.	It	н	н	
General C	hemistry Parameters											
	% Solids	95.9		%		1	SM2540 G Mod.	17-Mar-11	17-Mar-11	BD	1104696	;

Sample Identification	<u>n</u>
04-SC	

Client Project # 181125.1000.0000

<u>Matrix</u> Asphalt Collection Date/Time 15-Mar-11 11:50 Received 17-Mar-11

SB25773-	-04					i iopiidi:		17402 11 11		.,	.,,,,,,	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert
Semivolati	ile Organic Compounds by GC							,				
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		µg/kg dry	20,4	1	SW846 8082A	17-Mar-11	24-Mar-11	IMR	1104683	X
11104-28-2	Aroclor-1221	BRL		µg/kg dry	20.4	1	н			•	**	Х
11141-16-5	Aroclor-1232	BRL		µg/kg dry	20.4	1		"		11	•	Х
53469-21-9	Aroclor-1242	BRL		μg/kg đry	20.4	1	, 4	н	, н	**	н	Х
12672-29-6	Aroclor-1248	BRL		µg/kg dry	20.4	1	**	н	-	"	**	Х
11097-69-1	Aroclor-1254	2,730		μg/kg dry	20.4	1	**	Ħ	Ħ		п	Х
11096-82-5	Aroclor-1260	BRL		μg/kg dry	20.4	1	48	Ħ	**	п	**	Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	20.4	1	14	a		*	н	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	20.4	1	н	47	*		н	Χ
Surrogate r	recoveries:								•		*****	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	98		,	30-150 %		et	11	19		"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	109			30-150 %		ur	"	н	•	**	
2051-24-3	Decachlorobiphenyl (Sr)	72			30-150 %		u	n		u	10	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	76			30-150 %		10	"	ч	٠,		
General C	hemistry Parameters											
	% Solids	96.1		%		1	SM2540 G Mod.	17-Mar-11	17-Mar-11	BD	1104696	;

Sample Ide 05-SC SB25773-	entification		Client Project # 181125.1000.0000		)	<u>Matrix</u> Asphalt		ction Date Mar-11 11		_	Received 17-Mar-11		
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.	
Semivolati	le Organic Compounds by GC												
Polychlorin	nated Biphenyls by SW846 8082 by method SW846 3540C												
12674-11-2	Aroclor-1016	BRL		µg/kg dry	26.6	1	SW846 8082A	17-Mar-11	24-Mar-11	IMR	1104683	X	
11104-28-2	Arocior-1221	BRL		µg/kg dry	26.6	1	**	**		"	"	X	
11141-16-5	Aroclor-1232	BRL		µg/kg dry	26.6	1		Ħ	п	*1	н	X	
53469-21-9	Aroclor-1242	BRL		µg/kg dry	26.6	1	"	**	*	**	**	X	
12672-29-6	Aroclor-1248	BRL		µg/kg dry	26.6	1	**	н	а	**	н	X	
11097-69-1	Aroclor-1254	562		μg/kg dry	26.6	1		*1	11	n	,,	×	
11096-82-5	Aroclor-1260	BRL		µg/kg dry	26.6	1	•	19	10	•	**	X	
37324-23-5	Aroclor-1262	BRL		μg/kg dτy	26,6	1	11	H	н	11	-	X	
11100-14-4	Aroclor-1268	BRL		μg/kg dry	26.6	1		**	11	"		X	
Surrogate i	recoveries:												
10386-84-2	4,4-DB-Octafluorobiphenyi (Sr)	97			30-150 %		(4	#	**	.,	"		
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	113			30-150 %		11	н	11	н	14		
2051-24-3	Decachlorobiphenyl (Sr)	69			30-150 %		н	**	**	**	"		
2051-24-3	Decachlorobiphenyl (Sr) [2C]	71			30-150 %		11	н	Ħ	ч			
General C	hemistry Parameters												
	% Solids	73.5		%		1	SM2540 G Mod.	17-Mar-11	17-Mar-11	1 BD	1104696	3	

Sample Ide 06-SC SB25773-0			<u>Client Project # Matrix</u> 181125.1000.0000 Concrete			Collection Date/Time 15-Mar-11 11:07			Received 17-Mar-11  Analyst Batch			
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
	c Organic Compounds by GC nated Biphenyls by SW846 8082											
Prepared t	by method SW846 3540C								04 Man 44	IMR	1104683	Х
12674-11-2		BRL		µg/kg dry	58.6	1	SW846 8082A		24-Mar-11	IMR	1104003	
11104-28-2	Aroclor-1221	BRL		µg/kg dry	58.6	1	н	"	-			X
11141-16-5	Araclor-1232	BRL		μg/kg dry	58.6	1	11	u	10	11	u,	X
53469-21-9	Aroclor-1242	BRL		μg/kg dry	58.6	1	#	19	11	•	"	Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	58.6	1	в	"	**	н	н	Х
11097-69-1	Aroclor-1254	BRL		μg/kg dry	58.6	1	4	"	п	U	,	Х
		BRL		μg/kg dry	58.6	1	"	н	н		"	. X
11096-82-5	Aroclor-1260	BRL		μg/kg dry	58.6	1	н	10		10	11	X
37324-23-5	Aroclor-1262	BRL		µg/kg dry	58.6	1		**	n	**	•	X
11100-14-4	Aroclor-1268	- DINL										
Surrogate i	recoveries:						*	4	11	н	н	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	90			30-150 %			H	н	н	10	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	104			30-150 %		et				н	
2051-24-3	Decachlorobiphenyl (Sr)	69			30-150 %		10	17	**			
2051-24-3	Decachlorobiphenyl (Sr) [2C]	74			30-150 %		<b>3</b> 1		4	n	19	
General C	Chemistry Parameters % Solids	97.5		%		1	SM2540 G Mod	l. 17-Mar-1	1 17-Mar-1	1 BD	110469	· <b>6</b>

Sample Id 07-SC SB25773-	<u>-07</u>			t <u>Project #</u> .1000.000	0	Matrix Concrete		ction Date -Mar-11 11			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		µg/kg dry	61.8	1	SW846 8082A	17-Mar-11	24-Mar-11	IMR	1104683	Х
11104-28-2	Aroclor-1221	BRL		µg/kg dry	61.8	1	et .	11	н	**	a	Х
11141-16-5	Aroclor-1232	BRL		µg/kg dry	61.8	1	•	и	н	"	*	Х
53469-21-9	Aroclor-1242	BRL		µg/kg dry	61.8	1	*	•	#			Х
12672-29-8	Aroclor-1248	BRL		μg/kg dry	61.8	1	ч	, "	•	н		X
11097-69-1	Aroclor-1254	BRL		μg/kg dry	61.8	1	•	•	N	*	•	X
11096-82-5	Aroclor-1260	BRL		µg/kg dry	61.8	1	n		н	47	q	Х
37324-23-5	Aroclor-1262	BRL		µg/kg dry	61.8	1	•	п	**			Х
11100-14-4	Aroclor-1268	BRL		µg/kg dry	61.8	1	Ħ	Ħ	**	п	н	х
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyi (Sr)	97			30-150 %		n	. "	н	er	н	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	108			30-150 %		н	•	•	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	75			30-150 %		Ħ	*1	4	*	**	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	68			30-150 %		11	ď		н	10	
General C	hemistry Parameters											
•	% Solids	97.6		%		1	SM2540 G Mod.	17-Mar-11	17-Mar-11	BD	1104696	

08-SC	Sample Identification  18-SC  GB25773-08		181125.1000.0000 A		<u>Matrix</u> Asphalt		ollection Date/Time 15-Mar-11 12:00  C Prepared Analyzed		Received 17-Mar-11			
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Arodor-1016	BRL		μg/kg dry	20.0	1	SW846 8082A	17-Mar-11	24-Mar-11	IMR	1104683	Х
11104-28-2	Arodor-1221	BRL		µg/kg dry	20.0	1	в	н	11	н	14	Х
11141-16-5	Aroclor-1232	BRL		µg/kg đry	20.0	1		н	11	a	н	Х
53469-21-9	Arodor-1242	BRL		µg/kg dry	20.0	1	۳	*1		45	н	X
12672-29-6	Arodor-1248	BRL		µg/kg đry	20.0	1	•	•	н	**	п	Х
11097-69-1	Aroclor-1254	327		μg/kg đry	20,0	1	**	10	**			X
11096-82-5	Aroclor-1260	BRL		μg/kg dry	20.0	1	ď	n	•	н		X
37324-23-5	Aroclor-1262	BRL		µg/kg dry	20.0	1	**	*	10	n	**	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	20,0	1	я	H	н	71	11	X
Surrogate i	ecoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	81			30-150 %		н	11	•	17	н	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	86			30-150 %		н	u	4	**	rı	
2051-24-3	Decachlorobiphenyl (Sr)	55			30-150 %		и	7	11	н	41	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	50			30-150 %			**	n	•	11	
General C	hemistry Parameters											
	% Solids	95.6		%		1	SM2540 G Mod.	17-Mar-11	17-Mar-11	BD	1104696	

Sample Ic 09-SC SB25773-	dentification -09			t Project # 5.1000.000	0	<u>Matrix</u> Asphalt	-	ection Date -Mar-11 12			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	20.2	1	SW846 8082A	17-Mar-11	24-Mar-11	IMR	1104683	Х
11104-28-2	Aroclor-1221	BRL		µg/kg dry	20.2	1	н	н	10	19	н	Х
11141-16-5	Aroclor-1232	BRL		µg/kg dry	20.2	1	u	•	10	"	4	Х
53469-21-9	Aroclor-1242	BRL		µg/kg dry	20.2	1	a	e	н	н	**	$\mathbf{x}$
12672-29-6	Aroclor-1248	BRL		μg/kg dry	20.2	1	v <sub>i</sub> , 16	•	**	**	к	Х
11097-69-1	Aroclor-1254	131		µg/kg dıy	20.2	1	, "	n	10	47	re	X
11096-82-5	Aroclor-1260	BRL		µg/kg dry	20,2	1	"	н	н	н	*	Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	20.2	1	*	**	н	**	"	Х
11100-14-4	Aroclor-1268	BRL		µg/kg dry	20.2	1	11	19	11-	ef	11	X
Surrogate .	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	92			30-150 %		н	#		н	10	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	104			30-150 %		"	**	"	"	**	
2051-24-3	Decachlorobiphenyl (Sr)	72			30-150 %		tr .	14	0	*1		
2051-24-3	Decachlorobiphenyl (Sr) [2C]	61			30-150 %			н	"	"		
General C	hemistry Parameters											
	% Solids	98.4		%		1	SM2540 G Mod.	17-Mar-11	17-Mar-11	BD	1104696	j

Sample Io 10-SC SB25773	dentification			<u>t Project #</u> 5.1000.000	)	<u>Matrix</u> Asphalt	-	ction Date Mar-11 12			<u>ceived</u> Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolat	ile Organic Compounds by GC											
	inated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		µg/kg dry	558	1	SW846 8082A	17-Mar-11	19-Mar-11	SM	1104688	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	558	1	**	•	11	•	19	Х
11141-16-5	Araclor-1232	BRL		µg/kg dry	558	1	н	н	и	**	н	Х
53469-21-9	Aroclor-1242	BRL		µg/kg dry	558	1		**	**	н	н	X
12672-29-6	Arodor-1248	BRL		μg/kg dry	558	1	"		41	**	**	Х
11097-69-1	Aroclor-1254	BRL		µg/kg dry	558	1	н	*1	10	19	19	Χ
11096-82-5	Aroclor-1260	BRL		μg/kg dry	558	1	*		**	"	н	X
37324-23-5	Aroclor-1262	BRL		μg/kg dry	558	1	ų	n	*1	н	**	X
11100-14-4	Aroclor-1268	BRL		μg/kg dry	558	1	Ir	71	4	*	*	Х
Surrogate	recoveries:		,									
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	125			30-150 %				**	н	**	
1038 <del>6</del> -84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	95			30-150 %		и	et	**	11	17	
2051-24-3	Decachlorobiphenyl (Sr)	104			30-150 %		**	**	n	а	n	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	121			30-150 %		н	n	н		н	
General (	Chemistry Parameters											
	% Solids	98.0		%		1	SM2540 G Mod.	17-Маг-11	17-Mar-11	BD	1104696	j.

Sample Id 11-SC SB25773-	entification 11		-	t Project # 5.1000.0000	)	<u>Matrix</u> Asphalt		ction Date -Mar-11 12			<u>ceived</u> Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert
Semivolati	le Organic Compounds by GC											
	nated Biphenvis by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	539	1	SW846 8082A	17-Mar-11	19-Mar-11	SM	1104688	X
11104-28-2	Arodor-1221	BRL		µg/kg dry	539	1	Ħ	н	Ħ	Ħ	н	X
11141-16-5	Aroclor-1232	BRL		µg/kg dry	539	1	*	*	н	*	и	X
53469-21-9	Aroclor-1242	BRL		µg/kg dry	539	1	N	ti	Ħ	41	*	Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	539	1	*1	*1	41	IF	**	X
11097-69-1	Arodor-1254	BRL		μg/kg dry	539	1	••	4	41		14	Х
11096-82-5	Aroclor-1260	BRL		µg/kg dry	539	1	ır	**	10	4		X
37324-23-5	Aroctor-1262	BRL		µg/kg dry	539	1	**		14	н	н	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	539	1	н		н	*1	u	X
Surrogate r	ecoveries:	,								,		
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	128			30-150 %		n	**	44	14	48	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	96			30-150 %		"	**	10	15	10	
2051-24-3	Decachlorobiphenyl (Sr)	112			30-150 %		IR.	n	н	н	п	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	170	S02		30-150 %		"	n	п	41	н	
General C	hemistry Parameters						•		•			
	% Solids	94.5		%		1	SM2540 G Mod.	17-Mar-11	17-Mar-11	BD	1104696	j

Sample Id 12-SC SB25773-	lentification			<u>t Project #</u> 5.1000.0000	)	<u>Matrix</u> Concrete	<del></del>	ection Date -Mar-11 12		-	ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	66.7	1	SW846 8082A	17-Mar-11	19-Mar-11	SM	1104688	Х
11104-28-2	Aroclor-1221	BRL		µg/kg dry	66.7	1	st.	al		' u	••	X
11141-16-5	Aroclor-1232	BRL	•	μg/kg dry	66.7	1	n	40	н	19	•	X
53469-21-9	Aroclor-1242	BRL		µg/kg dry	66.7	1	IF.	17	*	U	111	X
12672-29-6	Aroclor-1248	BRL		µg/kg dry	66.7	1	**	10	4			X
11097-69-1	Aroclor-1254	136		μg/kg dry	66.7	1	17	н	*1	н	н	X
11096-82-5	Aroclor-1260	BRL		μg/kg dry	66.7	1	41	•	19	н	н	Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	66.7	1	41	**	19		"	X
11100-14-4	Aroclor-1268	BRL		µg/kg dту	66.7	1	#	4	н	4	7	X
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyi (Sr)	110			30-150 %			"	н	17	11	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	84			30-150 %		()	(1	ч	"	a	
2051-24-3	Decachlorobiphenyl (Sr)	97			30-150 %		а	н	ie .		te	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	312	\$02		30-150 %		•	**	(*	"	10	
General C	hemistry Parameters											
	% Solids	99.0		%		1	SM2540 G Mod.	17-Mar-11	17-Mar-11	BD	1104696	

Sample	<u>Identification</u>
13-SC	

Client Project # 181125.1000.0000

<u>Matrix</u> Asphalt Collection Date/Time 15-Mar-11 00:00 Received 17-Mar-11

SB25773-13			181125.1000.0000		Asphalt I		5-Mar-11 00:00		17-Mar-11		
CAS No.	Analyte(s)	Result	Flag Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolatil	le Organic Compounds by GC										
	nated Biphenyls by SW846 8082 by method SW846 3540C									•	
12674-11-2	Aroclor-1016	·BRL	μg/kg dr	y 611	1	SW846 8082A	17-Mar-11	19-Mar-11	SM	1104688	Х
11104-28-2	Arodor-1221	BRL	µg/kg di	y 611	1		H		н	*	Х
11141-16-5	Aroclor-1232	BRL	μg/kg di	y 611	1	ti	"	n	п	я	Х
53469-21-9	Aroclor-1242	BRL	μg/kg di	у 611	1	11	**	÷	•	11	Х
12672-29-6	Arodor-1248	BRL	µg/kg di	y 611	1	10	H	Ħ	**	et	X
11097-69-1	Aroclor-1254	754	μg/kg di	y 611	1	н	**	19	Ħ	n	X
11096-82-5	Arodor-1260	BRL	μg/kg di	y 611	1	52	ır	**	ď	u	Х
37324-23-5	Aroclor-1262	BRL	μg/kg di	у 611	1	19	10	41	"	16	Х
11100-14-4	Aroclor-1268	BRL	μg/kg di	у 611	1	н	n		п	н	Х
Surrogate r	ecoveries:										
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	137		30-150 %			11	ч	**	47	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	100		30-150 %		н	п	**	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	112		30-150 %		ır	**	н	**	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	145		30-150 %		t <del>i</del>	п	IT	В	#	
General C	hemistry Parameters										
	% Solids	99.0	%		1	SM2540 G Mod.	17-Mar-11	17-Mar-11	BD	1104696	3

Sample Identification  14-SC  SB25773-14				t Project # 5.1000.0000	)	<u>Matrix</u> Asphalt		ction Date -Mar-11 00			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclar-1016	BRL		μg/kg dry	560	1	SW846 8082A	17-Mar-11	19-Mar-11	SM	1104688	Х
11104-28-2	Aroclor-1221	BRL		μg/kg dry	560	1	п	71	**	и	#1	Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	560	1	ч	19	н	н	10	Х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	560	1	10	н	*	#	14	Х
12672-29-6	Aroclor-1248	BRL		µg/kg dry	560	1	u	н	. "	77	п	Х
11097-69-1	Aroclor-1254	BRL		μg/kg dry	560	1	"	•1	10	19	•	Х
11096-82-5	Aroclor-1260	BRL		µg/kg dry	560	1	N		н	н	11	Х
37324-23-5	Aroclor-1262	BRL		µg/kg dry	560	1	et	11	н	н	**	X
11100-14-4	Aroclor-1268	BRL		μg/kg dry	560	1	17	ri	**	*	*	×
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	120			30-150 %		н	**	Ħ	и	ŧ1	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	91			30-150 %		н	**	п	н	10	
2051-24-3	Decachlorobiphenyl (Sr)	103			30-150 %		18	•	**	*	ıı	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	127			30-150 %		и	đ	и	**	н	
General C	hemistry Parameters										-	
	% Solids	98.1		%		1	SM2540 G Mod.	17-Mar-11	17-Mar-11	8D	1104696	,

Sample Identification 15-SC SB25773-15				t Project # 5.1000.0000	)	<u>Matrix</u> Concrete		ection Date -Mar-11 00			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
***************************************	nated Biphenyls by SW846 8082- by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	67.1	1	SW846 8082A	17-Mar-11	19-Mar-11	SM	1104688	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	67.1	1	19	Ħ	Ħ	•		X
11141-16-5	Aroclor-1232	BRL		µg/kg dry	67.1	1	•	er er	**	42	•	Х
53469-21-9	Aroclor-1242	BRL		µg/kg dry	67.1	1	11	Ħ	10	11	u	Х
12672-29-6	Aroclor-1248	BRL		µg/kg dry	67.1	1		"	н	ŧì	P	Χ
11097-69-1	Aroclor-1254	163		μg/kg dry	67.1	1	n	** `	11	**	и	Х
11096-82-5	Aroclor-1260	BRL		μg/kg dry	67.1	1	<b>.</b>	11	19	4	н	Х
37324-23-5	Aroclor-1262	BRL		µg/kg dry	67.1	1	tr	"	0		*	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	67.1	1	п	11	16		н	X
Surrogate	recoveries:				·							
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	108	•		30-150 %		17	el	*1	*1	41	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	87			30-150 % ·		H		**	•	10	
2051-24-3	Decachlorobiphenyl (Sr)	86			30-150 %		**	н	Ħ	н	Ħ	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	95			30-150 %		П	Ħ	п	•	11	
General C	hemistry Parameters											

97.8

% Solids

SM2540 G Mod. 17-Mar-11 17-Mar-11 BD

1104696

Sample Identification  16-SC  SB25773-16				<u>t Project #</u> 5.1000.0000	)	<u>Matrix</u> Concrete		ection Date -Mar-11 00			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		µg/kg dry	69.3	1	SW846 8082A	17-Mar-11	19-Mar-11	SM	1104688	Х
11104-28-2	Aroclor-1221	BRL		μg/kg dry	69.3	1	**	Ħ	H	**	11	X
11141-16-5	Arodor-1232	BRL		µg/kg dry	69.3	1	17	10	**	ıı	н	Х
53469-21-9	Arocior-1242	BRL		µg/kg dry	69.3	1	**	н	*	н	н	Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	69.3	1	*1	п	#	"	•	Х
11097-69-1	Aroclor-1254	BRL		μg/kg dry	69.3	1	71	•		14	u	Х
11096-82-5	Aroclor-1260	BRL		μg/kg dry	69.3	1	10	10		п		Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	69.3	1	н	н	*1	н	н	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	69.3	1	н	*	44	4	Ħ	Х
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyi (Sr)	82			30-150 %		11		**	14	**	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	62			30-150 %		,,	n	H		If	
2051-24-3	Decachlorobiphenyl (Sr)	88			30-150 %		н	н	a	п	п	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	83			30-150 %		u	a		"	**	
General C	hemistry Parameters											
	% Solids	96,2		%		1	SM2540 G Mod.	17-Mar-11	17-Mar-11	BD	1104696	ı

Sample Identification 17-SC SB25773-17			Project # 1000.000	)	<u>Matrix</u> Concrete		ection Date -Mar-11 00	<del></del>		ceived Mar-11		
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	CerL
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	68.0	1	SW846 8082A	17-Mar-11	19-Mar-11	SM	1104688	Х
11104-28-2	Aroclor-1221	BRL		µg/kg dry	68.0	1	и	•1	4	n	44	Х
11141-16-5	Aroclor-1232	BRL		µg/kg dry	68.0	1	n	**	**	*	•	Х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	68.0	1	n		н	н		Х
12672-29-6	Aroclor-1248	BRL		µg/kg dry	68.0	1	•	•		*	tq.	Х
11097-69-1	Aroclor-1254	BRL		µg/kg dry	68.0	1	а		n	**	-	X
11096-82-5	Aroclar-1260	BRL		μg/kg dry	68.0	1	**	u		Ħ		Х
37324-23-5	Aroclor-1262	BRL		µg/kg dry	68.0	1	n ~	•	•		**	X
11100-14-4	Aroclor-1268	BRL		µg/kg dry	68.0	1	и	a	н	ft	16	Х
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobipheпуl (Sr)	109			30-150 %		н	и	н	u	н	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	89			30-150 %		н	"	**	*	н	
2051-24-3	Decachlorobiphenyl (Sr)	91		•	30-150 %		п	n	n	le .	**	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	76			30-150 %		14	"	*1		**	
General C	hemistry Parameters											
	% Solids	97.4		%		1	SM2540 G Mod.	17-Mar-11	17-Mar-11	BD	1104696	j

Sample Identification 18-SC SB25773-18			t Project # 5.1000.0000	1	<u>Matrix</u> Concrete		ection Date -Mar-11 00			ceived Mar-11		
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenvis by SW846 8082 by method SW846 3540C											
12674-11-2	Arodor-1016	BRL		µg/kg dry	69.0	1	SW846 8082A	17-Mar-11	19-Mar-11	SM	1104688	Х
11104-28-2	Arodor-1221	BRL		µg/kg dry	69.0	1	*	11		**	**	X
11141-16-5	Aroclor-1232	BRL		µg/kg dry	69.0	1	*	16	q	#	н	Х
53469-21-9	Arcclor-1242	BRL		µg/kg dry	69.0	1	*	17	10	"		Х
12672-29-6	Aroclor-1248	BRL		µg/kg dry	69.0	1	Ħ	n	H	#	н	X
11097-69-1	Aroclor-1254	BRL		μg/kg dry	69.0	1	п	π.	"	"	н	х
11096-82-5	Arodor-1260	BRL		µg/kg dry	69.0	1	**	Ħ	п	п	e	X
37324-23-5	Arodor-1262	BRL		µg/kg dry	69.0	1	H	*1	*1	Ħ	"	X
11100-14-4	Aroclor-1268	BRL		µg/kg dry	69,0	1	10	**	n	н	"	х
Surrogate r	ecoveries;								•			
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	104			30-150 %		19	N	•	*	н	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	76			30-150 %		п	n	н	11	н	
2051-24-3	Decachlorobiphenyl (Sr)	89			30-150 <b>%</b>		u	"	*	n	n	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	78			30-150 %		#	a	**	n	**	

General Chemistry Parameters % Solids

96.5

SM2540 G Mod. 17-Mar-11 17-Mar-11

Sample Identification  19-SC SB25773-19			nt Project # 5.1000.000	0	<u>Matrix</u> Concret		ction Date Mar-11 00			ceived Mar-11		
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	lle Organic Compounds by GC		<del></del>			·	***					
Polychlori	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		µg/kg dry	66.1	1	SW846 8082A	17-Mar-11	19-Mar-11	SM	1104688	Х
11104-28-2	Aroclor-1221	BRL		µg/kg dry	66.1	1	15	н	.10	•	n	Х
11141-16-5	Aroclor-1232	BRL		µg/kg dry	66.1	1	n	91	n	**	н	Х
53469-21-9	Aroclor-1242	BRL		µg/kg dry	66.1	1	н	"	Ħ	"	*	Х
12672-29-6	Aroclor-1248	BRL		µg/kg dry	66.1	1	н	*		"	41	Х
11097-69-1	Aroclor-1254	BRL		μg/kg dry	66.1	1	"	"	"	н	**	X
11096-82-5	Aroclor-1260	BRL		μg/kg·dry	66.1	1	10	и	14	*		Х
37324-23-5	Aroclor-1262	BRL		µg/kg dry	66.1	1	IT	ч	н	"		Х
11100-14-4	Aroclor-1268	BRL		µg/kg dry	66.1	1	H	41	н	#	н	Х
Surrogate i	recoveries:								-			
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	115			30-150 %		и		**	•	e	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	81			30-150 %		11	(1	и		ď	
2051-24-3	Decachlorobiphenyl (Sr)	91			30-150 %		19	**	н	**		
2051-24-3	Decachlorobiphenyl (Sr) [2C]	78			30-150 %		п	*1	•	8	11	
General C	hemistry Parameters											
	% Solids	96.7		%		1	SM2540 G Mod.	17-Mar-11	17-Mar-11	BD	1104696	

Sample Identification  20-SC  SB25773-20				t Project # .1000.0000	)	<u>Matrix</u> Concrete		ection Date -Mar-11 00			<u>ceived</u> Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	CerL
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		µg/kg dry	67.5	1	SW846 8082A	17-Mar-11	19-Mar-11	SM	1104688	X
11104-28-2	Arocior-1221	BRL		µg/kg dry	67.5	1	40	11	19	10	-	X
11141-16-5	Aroclor-1232	BRL		µg/kg dry	67.5	1	**	17	"	н		X
53469-21-9	Arocior-1242	BRL		µg/kg dry	67.5	1	ч	14	ŧ	*	<b>5</b> ¢	X
12672-29-6	Aroclor-1248	BRL		µg/kg dry	67.5	1	4	**	•	*	n	X
11097-69-1	Aroclor-1254	BRL		µg/kg dry	67.5	1	41	**	17	17		X
11096-82-5	Aroctor-1260	BRL		μg/kg dry	67.5	1	11	**	10		н	Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	67.5	1	u .		н	н	•	X
11100-14-4	Aroclor-1268	BRL		μg/kg dry	67.5	1	н	n	स	н	н .	Х
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	80			30-150 %		н	*1	**	#1	πŧ	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	62			30-150 %	•	11	**	,	"	н	
2051-24-3	Decachlorobiphenyl (Sr)	89			30-150 %		IF	и	н	н	н	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	80			30-150 %		10	"	**	•	"	
General C	hemistry Parameters											
	% Solids	96.4		%		1	SM2540 G Mod.	17-Mar-11	17-Mar-11	BD	1104696	,

Sample Identification 21-SC SB25773-21				t Project # 5.1000.000	0	Matrix Concrete		ection Date -Mar-11 00		-	ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		µg/kg dry	66.7	1	SW846 8082A	17-Mar-11	19-Mar-11	SM	1104688	х
11104-28-2	Aroclor-1221	BRL		µg/kg dry	66.7	1	M	17	**	•	**	Х
11141-16-5	Aroclor-1232	BRL		µg/kg dry	66.7	1	Ħ	н	н	10		х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	66.7	1	**	**	**	н		х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	66.7	1	ы	11	**	41	п	х
11097-69-1	Aroclor-1254	82.1		μg/kg dry	66.7	1	н	l#	n	**	•	X
11096-82-5	Aroclor-1260	BRL		µg/kg dry	66.7	1		н	н	**	**	X
37324-23-5	Aroclor-1262	BRL		µg/kg dry	66,7	1	**	п	M			х
11100-14-4	Arodor-1268	BRL		µg/kg dry	66.7	1	"	•	-	"		X
Surrogate :	recoveries:							•				
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	101			30-150 %		18	*	H	•	и	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	74			30-150 %	•	19	u	н	, <b>a</b>	e	
2051-24-3	Decachlorobiphenyl (Sr)	101			30-150 %		н .	*	"	••	**	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	93			30-150 %		п	н	Ħ	"	**	
General C	hemistry Parameters				•							
	% Solids	98,3		%		1	SM2540 G Mod.	17-Mar-11	17-Mar-11	BD	1104699	

Sample Identification  22-SC SB25773-22				t Project # 5.1000.000	0	<u>Matrix</u> Concrete		ction Date -Mar-11 00			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		µg/kg dry	68.6	1	SW846 8082A	17-Mar-11	19-Mar-11	SM	1104688	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	68.6	1	н	••		19	18	Х
11141-16-5	Aroclor-1232	BRL		µg/kg dry	68.8	1	н	<b>ft</b>	•	н	**	X
53469-21-9	Aroclor-1242	BRL		μg/kg dry	68.6	1	M	**	н	*	17	Х
12672-29-6	Aroclor-1248	BRL		µg/kg dry	68.6	1	Ħ	н	Ħ	н	19	X
11097-69-1	Aroclor-1254	BRL		µg/kg dry	68.6	1	*r	•	"	н	•	X
11096-82-5	Aroclor-1260	BRL		µg/kg dry	68.6	1	**		11	**	н	Х
37324-23-5	Aroclor-1262	BRL		µg/kg dry	68.6	1	10	n	10	•	н	X
11100-14-4	Aroclor-1268	BRL		µg/kg dry	68.6	1	**	**		ч	"	х
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	49			30-150 %		N	•	*	n	47	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	40			30-150 %		п	"	"	н	"	
2051-24-3	Decachlorobiphenyl (Sr)	105			30-150 %			19	**	**	14	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	73			30-150 %		er .	н	11		19	
General C	hemistry Parameters											
	% Solids	96.1		%		1	SM2540 G Mod.	17-Mar-11	17-Mar-11	BD	1104699	

Sample Identification 23-SC SB25773-23		<u>Client Proje</u> 181125.1000			<u>Matrix</u> Concrete		ection Date -Mar-11 00			ceived Mar-11		
CAS No.	Analyte(s)	Result	Flag Un	its +1	RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolat	ile Organic Compounds by GC					"""		*****				
	inated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL	μg/kç	dry 6	7.5	1	SW846 8082A	17-Mar-11	19-Mar-11	SM	1104688	X
11104-28-2	Aroclor-1221	BRL	μg/kg	dry 6	7.5	1	н	90	п		н	х
11141-16-5	Aroclor-1232	BRL	μg/kg	dry 6	7.5	1	#	•	H	•	н	X
53469-21-9	Aroclor-1242	BRL	μg/kg	dry 6	7.5	1	u u	•	10	п	**	x
12672-29-6	Aroclor-1248	BRL	µg/kg	dry 6	7.5	1	н	**	10	н	"	X
11097-69-1	Aroclor-1254	BRL	μg/kg	dry 6	7.5	1	**	n	ir			X
11096-82-5	Aroclor-1260	BRL	μg/kg	dry 6	7.5	1	н	44	44	H		X
37324-23-5	Aroclor-1262	BRL	μg/kg	dry 6	7.5	1	N		41	"	n	X
11100-14-4	Aroclor-1268	BRL	µg/kg	dry 6	7.5	1	H .	10	*1	**	ч	X
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	114		30-1	50 %		11	41	π	**	**	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	82		30-1	50 %		11	11	и	u	10	
2051-24-3	Decachlorobiphenyl (Sr)	98		30-15	50 %		**	н	и		**	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	. 78		30-1	50 %		n	н	n		**	
General C	hemistry Parameters											

% Solids

97.3

SM2540 G Mod. 17-Mar-11 17-Mar-11

BD 1104699

Sample Identification	O11 . T. 4 . 4			
24-SC	Client Project #	<u>Matrix</u>	Collection Date/Time	<u>Received</u>
	181125.1000.0000	Soil	15-Mar-11 00:00	17-Mar-11
SB25773-24	,			

SB25773	-24										
CAS No.	Analyte(s)	Result	Flag Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolat	ile Organic Compounds by GC										
	inated Biphenyls by SW846 8082 by method SW846 3540C	1									
12674-11-2	Aroclor-1016	BRL	µg/kg dry	27.4	1	SW846 8082A	17-Mar-11	19-Mar-11	SM	1104688	х
11104-28-2	Aroclor-1221	BRL	µg/kg dry	27.4	1	•	44	11	47	**	х
11141-16-5	Aroclor-1232	BRL	µg/kg dry	27.4	1	**	**	10		**	X
53469-21-9	Aroclor-1242	BRL	µg/kg dry	27.4	1	#	41	n n	10	ır	X
12672-29-6	Aroclor-1248	BRL	µg/kg dry	27.4	1	11	•	μ	10	n	х
11097-69-1	Aroclor-1254	69.2	µg/kg dry	27.4	1	п	**	10		10	X
11096-82-5	Aroclor-1260	BRL	µg/kg dry	27.4	1	н			h		х
37324-23-5	Aroclar-1262	BRL	μg/kg dry	27.4	1	11*		N	и	ır	X
11100-14-4	Aroclor-1268	BRL	µg/kg dry	27.4	1	IF	n	n	н	10	×
Surrogate i	recoveries:										
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	144		30-150 %		u	•	**	н	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	89		30-150 %		19	41	u	a	н	
2051-24-3	Decachlorobiphenyl (Sr)	106		30-150 %		19	•	11	n	14	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	114		30-150 %		н	11	**	4	н	
General C	hemistry Parameters										
	% Solids	68.9	%		1	SM2540 G Mod.	17-Mar-11	17-Mar-11	BD	1104699	J

25-SC	SB25773-25		Client Project # 181125.1000.0000		Asphalt 15		lection Date/Time 5-Mar-11 00:00			ceived Mar-11		
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenyis by SW846 8082 by method SW846 3540C											
12674-11-2	Arodor-1016	BRL		µg/kg d≀y	192	1	SW846 8082A	17-Mar-11	19-Mar-11	SM	1104688	X
11104-28-2	Aroclor-1221	BRL		hg/kg qu	192	1	н	н	11	11		х
11141-16-5	Aroclor-1232	BRL		µg/kg dry	192	1		м	*.	н	w	х
53469-21-9	Aroclor-1242	BRL		µg/kg dry	192	1	н	ŧı	18	n	. 12	X
12672-29-6	Aroclor-1248	BRL		µg/kg dry	192	1	ď	**	и	н	**	Х
11097-69-1	Aroclor-1254	BRL		µg/kg dry	192	1	*	#	n		10	х
11096-82-5	Aroclor-1260	BRL		µg/kg dry	192	1	15	49	ķi	**	ti	Х
37324-23-5	Aroclor-1262	BRL		µg/kg dry	192	1		17			"	X
11100-14-4	Arodor-1268	BRL		μg/kg dry	192	1	н	н	u	44	•	X
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	123			30-150 %		a	и	11	н	**	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	92			30-150 %		п	н	#	"		
2051-24-3	Decachlorobiphenyl (Sr)	98			30-150 %		**	44	al	**	IR	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	162	S02		30-150 %				41	44	14	
General C	hemistry Parameters											
•	% Solids	94.5		%		1	SM2540 G Mod.	17-Mar-11	17-Mar-11	BD	1104699	

26-SC	SB25773-26				Matrix Collection D Asphalt 15-Mar-11					<u>ceived</u> Mar-11		
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert
Semivolati	ile Organic Compounds by GC										,	
	nated Biphenvis by SW846-8082 by method SW846-3540C											
12674-11-2	Aroclor-1016	BRL		µg/kg dry	66.6	1	SW846 8082A	17-Mar-11	19-Mar-11	SM	1104688	×
11104-28-2	Aroclor-1221	BRL		µg/kg dry	66.6	1	n	н	'n	17	10	X
11141-16-5	Aroclor-1232	BRL		µg/kg dry	66.6	1	11	•	11	**	19	Х
53469-21-9	Aroclor-1242	BRL		µg/kg dry	66.6	1	н	н	н	n	10	X
12672-29-6	Aroclor-1248	BRL		µg/kg đry	66.6	1	Ħ	u	н		н	X
11097-69-1	Aroclor-1254	BRL		µg/kg đry	66.6	1	н .		At		и	X
11096-82-5	Aroclar-1260	BRL		μg/kg dry	66.6	1	н	"	**	н	n	X
37324-23-5	Aroclar-1262	BRL		µg/kg đry	66.6	1	н	**	**	n	н	X
«11100-14-4	Aroclor-1268	BRL		µg/kg đry	66.6	1	n	10	•	•	и	X
Surrogate i	recoveries:										***************************************	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	98			30-150 %		ď	**		п	н	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	81			30-150 %		*1	и	#	п	77	
2051-24-3	Decachlorobiphenyl (Sr)	92			30-150 %		n	н	11	**	**	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	669	\$02		30-150 %		11	н	. н	"	**	
General C	hemistry Parameters											
	% Salids	99.1		%		1	SM2540 G Mod.	17-Mar-11	17-Mar-11	BD	1104699	

<u>Sample</u>	Identification
<b>27-</b> SC	

Client Project # 181125.1000.0000

Matrix Soil Collection Date/Time 15-Mar-11 00:00 Received 17-Mar-11

SB25773-	27		19112	.1000.0000		Don						
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Arodor-1016	BRL		μg/kg dry	25.8	1	SW846 8082A	17-Mar-11	19-Mar-11	SM	1104688	X
11104-28-2	Arodor-1221	BRL		µg∕kg dry	25.8	1	н	11	ur .	10	н	Х
11141-16-5	Aroclor-1232	BRL		μg/kg dηy	25.8	1	**	п	**	*	ч	Х
53469-21-9	Aroclor-1242	BRL		µg/kg dry	25.8	1	41	Ħ	n	**	•	Х
12672-29-6	Aroclor-1248	BRL		µg/kg dry	25.8	1	'n		11	**	н	X
11097-69-1	Aroclor-1254	59.8		µg/kg dry	25.8	1	ri	и	n	"	н	Х
11096-82-5	Aroclor-1260	BRL		µg/kg dry	25.8	1	. 4	16	**	"	10	X
37324-23-5	Aroclor-1262	BRL		μg/kg dry	25.8	1	н			"	м	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	25.8	1	u	șr.	n	"		X
Surrogate r	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	126			30-150 %		н	н	н	н	н	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	93			30-150 %		14	VI	**	•	**	
2051-24-3	Decachlorobiphenyl (Sr)	110			30-150 %		н	п	14	н	**	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	128			30-150 %		**	**	*1	•	**	
General C	hemistry Parameters											
	% Solids	76.5		%		1	SM2540 G Mod.	17-Mar-11	17-Mar-11	BD	1104699	3

28-SC	ample Identification 8-SC B25773-28		Client Project # 181125.1000.0000		<u>Matrix</u> Soil		ection Date -Mar-11 00			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert
Semivolati	ile Organic Compounds by GC										
	nated Biphenyls by SW846 8082 by method SW846 3540C										
12674-11-2	Aroclor-1016	BRL	μg/kg d	ry 27.7	1	SW846 8082A	17-Mar-11	19-Mar-11	SM	1104688	X
11104-28-2	Aroclor-1221	BRL	μg/kg d	ry 27.7	1	**	н	n	н	н	Х
11141-16-5	Aroclor-1232	BRL	µg/kg d	ry 27.7	1	, <b>*</b> *	*	**	"	*	Х
53469-21-9	Arocior-1242	BRL	μg/kg d	ry 27.7	1		1t	41	19	*1	Х
12672-29-6	Arocior-1248	BRL	μg/kg d	ry 27.7	1	-14	**	11	н	**	Х
11097-69-1	Aroclor-1254	92.3	μg/kg d	ry 27,7	1	н		1¢	•		х
11096-82-5	Aroclor-1260	BRL	µg/kg d	ry 27.7	1	Ħ	N	н	4	н	Х
37324-23-5	Aroclor-1262	BRL	µg/kg d	ry 27.7	1	•	**	4	**	**	х
11100-14-4	Aroclor-1268	BRL	μg/kg d	ry 27.7	1		**	#e	**	**	x
Surrogate i	recoveries:				·						
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	128		30-150 %		**	н	"	"	P	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	92		30-150 %		•	н	н	"	19	
2051-24-3	Decachlorobiphenyl (Sr)	106		30-150 %		10	40		11	•	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	98		30-150 %			11	**	н	ď	
General C	hemistry Parameters										
	% Solids	69.3	%		1	SM2540 G Mod.	17-Mar-11	17-Mar-11	BD	1104699	J

	umple Identification									•		
	entification		Clier	nt Project#		Matrix	Colle	ection Date	/Time	Re	ceived	
29-SC	•		18112	5.1000.0000	)	Concrete	e 15	-Mar-11 00	0:00	17-	Mar-11	
SB25773-	29											
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		µg/kg dry	68.6	1	SW846 8082A	17-Mar-11	19-Mar-11	SM	1104688	Х
11104-28-2	Aroclor-1221	BRL		µg/kg dry	68.6	1	н	н	**	**	•	X
11141-16-5	Aroclor-1232	BRL		µg/kg dry	68.6	1	u	н	49	10	**	X
53469-21-9	Aroclor-1242	BRL		µg/kg dry	68.6	1	*1	п	н	n	16	X
12672-29-6	Aroclor-1248	BRL		μig/kg dry	68.6	1	11	**	11	n		Х
11097-69-1*	Aroclor-1254	BRL		µg/kg dry	68.6	1	10	16	Ħ	н	a	Х
11096-82-5	Aroclar-1260	BRL		µg/kg dry	68.6	1	"	11	. "	"	14	Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	68.6	1	14	н	**	"	н	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	68.6	1	N	n	11	"		Χ
Surrogate r	ecoveries:											•
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	162	S02		30-150 %		4	a	и	•	и	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	122			30-150 %		ar	**	и	п	ıt	
2051-24-3	Decachlorobiphenyl (Sr)	138			30-150 %			н	M	**		
2051-24-3	Decachlorobiphenyl (Sr) [2C]	99			30-150 %		14		47		•	
General Cl	hemistry Parameters											

% Solids

96,2

SM2540 G Mod. 17-Mar-11 17-Mar-11 BD

30-SC	B25773-30				<u>Matrix</u> Concrete		ection Date -Mar-11 00			<u>ceived</u> Mar-I l		
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	65.2	1	SW846 8082A	18-Mar-11	24-Mar-11	TĢ	1104724	Х
11104-28-2	Aroclor-1221	BRL		µg/kg dry	65,2	1	झ	đ	н	st	я	Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	65,2	1	70	7	W .	19	**	Х
53469-21- <del>9</del>	Aroclor-1242	BRL		µg/kg dry	65.2	1	19	đ	19	19	17	Х
12672-29-6	Aroclor-1248	BRL.		µg/kg dry	65.2	1	N	**	10		10	Х
11097-69-1	Aroclor-1254	126		µg/kg dry	65.2	1	*	н	н	*		Х
11096-82-5	Aroclor-1260	BRL		μg/kg dry	65.2	1	н	II	н	Ħ	н	Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	65,2	1	**	•	н	11	н	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	65.2	1	ď	Ħ	н	#	•	, X
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	85			30-150 %		N	ij	н	н		
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	99			30-150 %		н		n	•	н	
2051-24-3	Decachlorobiphenyl (Sr)	74			30-150 %		91	n	*1	**	**	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	70			30-150 %		•	"	•		"	
General C	hemistry Parameters											
	% Solids	96.3		%		1	SM2540 G Mod.	17-Mar-11	17-Mar-11	BD	1104699	:

31-SC	SB25773-31				<u>Matrix</u> Concrete		ollection Date/Time 15-Mar-11 00:00			ceived Mar-11		
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL,		µg/kg dry	54.7	1	SW846 8082A	- 18-Mar-11	24-Mar-11	TG	1104724	Х
11104-28-2	Aroclor-1221	BRL		µg/kg dry	54.7	1	"	п		11		Х
11141-16-5	Aroclor-1232	BRL		µg/kg dry	54.7	1	**	**	•	.,	**	X
53469-21-9	Aroctor-1242	BRL,		µg/kg dry	54.7	1	*	n	u	н	IF	Х
12672-29-6	Aroclor-1248	8RL		µg/kg dry	54.7	1	#	**	*			х
11097-69-1	Aroclor-1254	BRL		µg/kg dry	54.7	1		0	**	•	н	х
11096-82-5	Aroctor-1260	8RL		µg/kg dry	54.7	1	и	<b>.</b> "	**	q		х
37324-23-5	Aroclor-1262	BRL		µg/kg dry	54.7	1	•	*		**	*	X
11100-14-4	Aroclor-1268	BRL		µg/kg dry	54.7	1	н	н	н	Ð	н	x
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	83			30-150 %		"	17	**	"	4	
10386-84-2	4,4-DB-Octafluorobipheпуl (Sr) [2C]	102			30-150 %		Ħ	44	**	"	łŧ	
2051-24-3	Decachlorobiphenyl (Sr)	84			30-150 %		10	'n	10	"		
2051-24-3	Decachlorobiphenyl (Sr) [2C]	81			30-150 %		н	н		+1		
General C	hemistry Parameters											

% Solids

95.3

SM2540 G Mod. 17-Mar-11 17-Mar-11 BD 1104699

Sample Identification  32-SC  SB25773-32			•	<u>Project #</u> 1000.000	)	<u>Matrix</u> Concrete		ection Date -Mar-11 00			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert
Semivolati	le Organic Compounds by GC						•			,		
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		µg/kg dry	53.5	1	SW846 8082A	18-Mar-11	24-Mar-11	TG	1104724	X
11104-28-2	Aroclar-1221	BRL		µg/kg dry	53.5	1	н	H	•	11	e	Х
11141-16-5	Aroclor-1232	BRL		µg/kg dry	53.5	1	**	**	10	4	19	Х
53469-21-9	Arodor-1242	BRL		μg/kg dry	53.5	1	и	*	н	**	"	Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	53,5	1	H	11	**	10	**	Х
11097-69-1	Aroclor-1254	BRL		µg/kg dry	53.5	1	*	19		п	"	Х
11096-82-5	Aroclor-1260	BRL		µg/kg dry	53.5	1	n	e	н	•	н	Х
37324-23-5	Arocior-1262	BRL		µg/kg dry	53.5	1	•	11	*1	17	**	Х
11100-14-4	Aroclor-1268	BRL		µg/kg dry	53.5	1 .	h	H	<b>1</b> †	".	10	X
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	89			30-150 %		17	11	at.	18	n	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	111			30-150 %		н	rt	17	и	**	
2051-24-3	Decachlorobiphenyl (Sr)	87			30-150 %			**	*	"	н	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	88	4		30-150 %		N	11	u	**	45	
General C	hemistry Parameters											
	% Solids	98.5		%		1	SM2540 G Mod.	17-Mar-11	17-Mar-11	l BD	1104699	)

33-SC	SB25773-33						ollection Date/Time 15-Mar-11 00:00			<u>ceived</u> Mar-11		
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	61.8	1	SW846 8082A	18-Mar-11	24-Mar-11	TG	1104724	Х
11104-28-2	Aroclor-1221	BRL		µg/kg dry	61.8	1	н	11	п	11	•	X
11141-16-5	Aroclor-1232	BRL		µg/kg dry	61.8	· 1	Ħ	и	н	н	*	Х
53469-21-9	Aroclor-1242	BRL		µg/kg dry	61.8	1	47	п	**	61	10	Х
12672-29-6	Aroclor-1248	BRL		µg/kg dry	61.8	1	u	a		Ħ	н	Х
11097-69-1	Aroclor-1254	77.6		μg/kg dry	61.8	1	*	10	н	н	•	Х
11096-82-5	Aroclor-1260	BRL		μg/kg dry	61.8	1	. "	н	#	ŧI	16	Х
37324-23-5	Arodor-1262	BRL		µg/kg dry	61.8	1	44	u	•	11	н	Х
11100-14-4	Arodor-1268	BRL		μg/kg dry	61.8	1	n	*	14	п	11	Х
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	82			30-150 %		17	н	18	*		
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	100			30-150 %		. "	* #1	10	"	п	
2051-24-3	Decachlorobiphenyl (Sr)	79			30-150 %		н	14	•	н	•	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	84			30-150 %		12	н	*	11	19	-
General C	hemistry Parameters											
	% Solids	97.9		%		1	SM2540 G Mod.	17-Mar-11	17-Mar-11	BD	1104690	ı

34-SC	325773-34		•		Concrete 15-		ection Date/Time 5-Mar-11 00:00			ceived Mar-11		
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenyis by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		µg/kg dry	58.7	1	SW846 8082A	18-Mar-11	24-Mar-11	TG	1104724	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	58.7	1	ti	17	**	**	17	Х
11141-16-5	Aroclor-1232	BRL		µg/kg dry	58.7	1	e	TF	н	**	н	Х
53469-21-9	Aroclor-1242	BRL		µg/kg dry	58.7	1	**	н	**	*		X
12672-29-6	Aroclor-1248	BRL		μg/kg dry	58.7	1	*	#1	n	-	н	X
11097-69-1	Aroclor-1254	BRL		µg/kg dry	58.7	1	**	•	••	•		X
11096-82-5	Aroclor-1260	BRL		µg/kg dry	58.7	1	u	TF	10	#	11	X
37324-23-5	Aroclor-1262	BRL		µg/kg dry	58.7	1	•	11	14	10	*	X
11100-14-4	Aroclar-1268	BRL		µg/kg dry	58.7	1	d	**	H	14	**	×
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	88			30-150 %		н	**	ч	**	Ħ	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	108			30-150 %		H	u	"	**	41	
2051-24-3	Decachlorobiphenyl (Sr)	86	•		30-150 %		Ħ	н	н	н	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	90			30-150 %		#	#	el	n	n	
General C	hemistry Parameters											
	% Solids	97.5		%		1	SM2540 G Mod.	17-Mar-11	17-Mar-11	BD	1104690	ı

35-SC	B25773-35		181125.1000.0000 C		<u>Matrix</u> Concrete	Concrete 15-Mar-11 00:						
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		µg/kg dıy	61.8	1	SW846 8082A	18-Mar-11	24-Mar-11	TG	1104724	X
11104-28-2	Aroclor-1221	BRL		µg/kg dry	61.8	1	**	**	#1	"	16	X
11141-16-5	Aroclor-1232	BRL		µg/kg dry	61.8	1	п	41	11	Ħ	10	X
53469-21-9	Aroclor-1242	BRL		µg/kg dry	61.8	1	*	н		**	м	X
12672-29-6	Aroclor-1248	BRL		µg∕kg dry	61.8	1	•	*	et	н	41	Х
11097-69-1	Aroclor-1254	BRL		µg/kg ɗry	61.8	1	**	#	11	11	11	X
11096-82-5	Aroctor-1260	BRL		µg/kg dry	61.8	1	N	"	16	и	*	X
37324-23-5	Aroclor-1262	BRL		µg/kg dry	61.8	1	м	**	н	н	N	X
11100-14-4	Aroclor-1268	BRL		μg/kg dry	61.8	1	**	**	π	,	"	X
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyi (Sr)	77			30-150 %		н	ti	n	"	n	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	92			30-150 %		46	71	<b>#</b> f	"	n	
2051-24-3	Decachlorobiphenyl (Sr)	79			30-150 %		и			10	ir	
2051-24-3	Decachiorobiphenyi (Sr) [2C]	85			30-150 %		<b>81</b>	н	п	и	19	
General C	Themistry Parameters											
	% Solids	96,9		%		1	SM2540 G Mod.	17-Mar-11	17-Mar-11	₿Ď	1104690	1

Sample Id 36-SC SB25773-	-36			t Project # 5.1000.000	0	<u>Matrix</u> Concrete		ction Date Mar-11 00			<u>ceived</u> Маг-II	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C	•										
12674-11-2	Aroclor-1016	BRL		μg/kg dry	61.9	1	SW846 8082A	18-Mar-11	24-Mar-11	TG	1104724	Х
11104-28-2	Aroclor-1221	BRL		µg/kg dry	61.9	1	•	ч	н	Ħ		X
11141-16-5	Aroclor-1232	BRL		µg/kg dry	61.9	1 .	77	41		н	•	X
53469-21-9	Aroclor-1242	BRL		µg/kg dry	61.9	1	*	10	•	•	**	Х
12672-29-6	Aroclor-1248	BRL		µg/kg dry	61.9	1	Ħ	10	"		11	Х
11097-69-1	Aroclor-1254	BRL		μg/kg dry	61,9	1	15	19	ir	**		Х
11096-82-5	Aroclor-1260	BRL		μg/kg dry	61.9	1	н	н	n	**	16	х
37324-23-5	Arocior-1262	BRL		μg/kg dry	61.9	1	n	*1	**	11		Х
11100-14-4	Aroclor-1268	BRL		µg∕kg dry	61.9	1	**	•	n	н	н	X
Surrogate	recoveries:		·	-								
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	91			30-150 %		10	11	н	я	**	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	104			30-150 %		19	**	11	"	17	
2051-24-3	Decachlorobiphenyl (Sr)	89			30-150 %		n	**				
2051-24-3	Decachlorobiphenyl (Sr) [2C]	82			30-150 %		n	**	π	Ħ	N	
General C	hemistry Parameters											
	% Solids	97.3		%		1	SM2540 G Mod.	17-Mar-11	17-Mar-11	BD	1104690	ı

Sample Id 37-SC SB25773-	lentification			<u>t Project #</u> .1000.0000	)	Matrix Concrete		ction Date Mar-11 00			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Arodor-1016	BRL		μg/kg dry	59.6	1	SW846 8082A	18-Mar-11	24-Mar-11	TG	1104724	X
11104-28-2	Arodor-1221	BRL		μg/kg dry	59,6	1	н	16	и	и	н	Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	59.6	1	4	14	n	**	**	Х
53469-21-9	Arodor-1242	BRL		µg/kg dry	59.6	1	er er	tt		**	**	X
12672-29-6	Aroclor-1248	BRL		μg/kg dry	59.6	1	n	T	N	н	N	Х
11097-69-1	Arodor-1254	BRL		μg/kg dry	59,6	1	н	17	H	"	"	Х
11096-82-5	Aroclor-1260	BRL		μg/kg dry	59.6	1	71	н	#1	*t	**	X
37324-23-5	Aroclor-1262	BRL		µg/kg dry	59.6	1	4	"			**	Х
11100-14-4	Arocior-1268	BRL		μg/kg dry	59.6	1	"	17	u	ti	10	X
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	88			30-150 %		at .	**	7É	16	**	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	107			30-150 %		IF	41	"	п		
2051-24-3	Decachlorobiphenyl (Sr)	86			30-150 %		н		*1	**	н	
2051-24-3	Decachlorobiphenyi (Sr) [2C]	82			30-150 %		Ħ	н	)ŧ	п	н	
General C	hemistry Parameters											
	% Solids	96.4		%		1	SM2540 G Mod.	17-Mar-11	17-Mar-11	BD	1104690	ı

Sample Id 38-SC SB25773-	dentification			<u>it Project #</u> 5.1000.000	)	<u>Matrix</u> Concrete		ection Date -Mar-11 00			<u>ceived</u> Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL,		μg/kg dry	62,9	1	SW846 8082A	18-Mar-11	24-Mar-11	TG	1104724	Х
11104-28-2	Aroclor-1221	BRL		μg/kg dry	62.9	1	¥I	**	••	#		х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	62.9	1	т .		•	**	-	х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	62,9	1	16	N	78	**	н	х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	62.9	1	11	н	19		Ħ	х
11097-69-1	Aroclor-1254	BRL		µg/kg dry	62.9	1		н	19	н	#r	X
11096-82-5	Aroclor-1260	BRL		µg/kg dry	62.9	1	и	Ħ	н	**	Ð	x
37324-23-5	Aroclor-1262	BRL		µg/kg dry	62.9	1	н	*	**	**	18	x
11100-14-4	Aroclor-1268	BRL		µg/kg dry	62.9	1	π	0	u	**	и	x
Surrogate	recoveries:										*********	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	89			30-150 %		18	M	•		14	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	100			30-150 %		10	н	10	"	*	
2051-24-3	Decachlorobiphenyl (Sr)	87			30-150 %		19	*1	н	9	ŧI	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	86			30-150 %		u	#1	ti	н	n	
General C	hemistry Parameters								•			
	% Solids	96.0		%		1	SM2540 G Mod.	17-Mar-11	17-Mar-11	BD	1104690	

Sample Id 39-SC SB25773-	dentification -39			t Project # .1000.000	)	<u>Matrix</u> Concrete	· · · · · · · · · · · · · · · · · · ·	ection Date -Mar-11 00			<u>ceived</u> Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Arodor-1016	BRL		μg/kg dry	55,7	1	SW846 B0B2A	18-Mar-11	24-Mar-11	TG	1104724	Х
11104-28-2	Aroclor-1221	BRL		μg/kg dry	55.7	1	11	н	u	11	11	Χ
11141-16-5	Aroclor-1232	BRL		µg/kg đry	55,7	1	н	п	"	н		х
53469-21-9	Aroclor-1242	BRL		µg/kg dry	55.7	1	н	*1	10	н	44	X
12672-29-6	Aroclor-1248	BRL		µg/kg dry	55.7	1	н	1¢	19			X
11097-69-1	Aroclor-1254	BRL		µg/kg dry	55.7	1	vi	rt	n	a	w	х
11096-82-5	Aroclor-1260	BRL		µg/kg dry	55.7	1	**	"	н	10	**	Х
37324-23-5	Aroclor-1262	BRL		µg/kg dry	55.7	1	**	•	**	**		X
11100-14-4	Aroclor-1268	BRL		µg/kg dry	55.7	1	Ħ	<b>et</b>	n	н	19	X
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	84			30-150 %		"	IF	11	a	ы	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	100			30-150 %		#	**	vt	"	*	
2051-24-3	Decachlorobiphenyl (Sr)	87			30-150 %		и	11	**	in	.,	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	84			30-150 %		n	"	11	u	11	
General C	hemistry Parameters											
	% Solids	96.8		%		1	SM2540 G Mod.	17-Mar-11	17-Mar-11	BD	1104690	

Sample Identification 40-SC SB25773-40			<u>Project #</u> 1000.0000	1	<u>Matrix</u> Asphalt		ction Date Mar-11 00			ceived Mar-11	
CAS No. Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolatile Organic Compounds by											
Polychlorinated Biphenyls by SW84 Prepared by method SW846 3540C											
12674-11-2 Aroclor-1016	BRL		μg/kg dry	19.1	1	SW846 8082A	18-Mar-11	24-Mar-11	TG	1104724	X
11104-28-2 Aroclor-1221	BRL		μg/kg dry	19.1	1	14		#	н	14	X
11141-16-5 Aroclor-1232	BRL		µg/kg dry	19.1	1	TV .	#	#	ŧſ	п	X
53469-21-9 Aroctor-1242	BRL		µg/kg dry	19.1	1	н	* н	•	**	н	Х
12672-29-6 Aroclor-1248	BRL		µg/kg dry	19.1	1		н	н	Ħ	•	X
11097-69-1 Aroclor-1254	244		µg/kg dry	19.1	1	**	er er	31	tı	I <del>I</del>	X
11096-82-5 Aroclor-1260	BRL		μg/kg dry	19.1	1		"	10	"	17	X
37324-23-5 Aroclor-1262	BRL		μg/kg dry	19.1	1	н	п	н	11	н	Χ
11100-14-4 Aroclor-1268	BRL		μg/kg dry	19.1	1		и	**	**	**	X
Surrogate recoveries:											
10386-84-2 4,4-DB-Octafluorobiphenyl	(Sr) 72			30-150 %		н	"		"		
10386-84-2 4,4-DB-Octafluorobiphenyl [2C]	(Sr) 83			30-150 %		II.	(i	н	17	п	
2051-24-3 Decachlorobiphenyl (Sr)	72			30-150 %		н	**	41	н	"	
2051-24-3 Decachlorobiphenyl (Sr) [26	C] 65			30-150 %		at	**	**	**	TO.	
General Chemistry Parameters											
% Solids	98.8		%		1	SM2540 G Mod.	17-Mar-11	17-Mar-11	BD	1104690	)

Sample Id 41-SC SB25773-	dentification 41			t Project # 5.1000.000	)	<u>Matrix</u> Asphalt	-	ection Date -Mar-11 00			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	<b>÷</b> RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Arocior-1016	BRL		μg/kg dry	19.3	1	SW846 8082A	18-Mar-11	24-Mar-11	TG	1104724	X
11104-28-2	Aroclor-1221	BRL		µg/kg dry	19.3	1	**	*1	<b>#</b>	**	**	X
11141-16-5	Aroclor-1232	BRL		μg/kg dry	19.3	1	**	Ħ	10	. "	19	X
53469-21-9	Aroclor-1242	BRL		μg/kg dry	19.3	1	*	**	14	4	19	Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	19.3	1	п	91	н	11	19	X
11097-69-1	Aroclar-1254	2,260		μg/kg dry	19.3	1		**	H	11	н	Х
11096-82-5	Aroclor-1260	BRL		µg/kg dry	19.3	1	Iŧ	10	н	Iŧ	п	Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	19.3	1	19	ħ	•1	W	н	X
11100-14-4	Aroclor-1268	BRL		μg/kg dry	19.3	1	и	n	. #	19	**	Х
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	69			30-150 %		N	н	11	•	41	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	83			30-150 %		н	•	н	н	11	
2051-24-3	Decachlorobiphenyl (Sr)	64			30-150 %		"	**	*	*	**	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	65			30-150 %		Ħ	#1		*	**	
General C	hemistry Parameters											
	% Solids	99.1		%		1	SM2540 G Mod.	17-Mar-11	17-Mar-11	BD	1104690	

Sample Id 42-SC SB25773-	lentification 42			t Project # 5.1000.000		<u>Matrix</u> Asphalt	-	ection Date -Mar-11 00			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenvis by SW846 8082 by method SW846 3540C							•				
12874-11-2	Aroclor-1016	BRL		μg/kg dry	20.0	1	SW846 8082A	18-Mar-11	24-Mar-11	TG	1104724	Х
11104-28-2	Aroclor-1221	BRL		μg/kg dry	20.0	1	R	19	Ħ	н		x
11141-16-5	Aroclor-1232	BRL		μg/kg dry	20.0	1	q	"	••	Ħ	10	х
53469-21-9	Aroclar-1242	BRL		μg/kg dry	20.0	1	<b>₽</b>	16	11	If		X
12672-29-6	Aroclor-1248	BRL		μg/kg dry	20,0	1	er er	*	#1	н	*	X
11097-69-1	Aroclor-1254	657		μg/kg dry	20.0	1	10	н	71	н	n	X
11096-82-5	Arodor-1260	BRL		μg/kg dry	20.0	1	Te .	п	41	W	н	X
37324-23-5	Arodor-1262	BRL		μg/kg dry	20.0	1		н	10		*	х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	20.0	1	н	*1	it.	19	н	x
Surrogate r	ecoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	78			30-150 %		n	Ħ	н	n	n	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	77			30-150 %		н	, H	п	**	*1	
2051-24-3	Decachlorobiphenyl (Sr)	68			30-150 %		n	**	н	Ħ	er er	
2051-24-3	Decachlorobiphenyl (Sr) [2С]	62			30-150 %		n	**	"	#	16	
General C	hemistry Parameters						*					
	% Solids	98.0		%		1	SM2540 G Mod.	17-Mar-11	17-Mar-11	BD	1104690	

Sample Id 43-SC SB25773-	dentification			t <u>Project #</u> 5.1000.000		<u>Matrix</u> Asphalt		ection Date -Mar-11 0(			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	19.2	1	SW846 8082A	18-Mar-11	24-Mar-11	TG	1104724	Х
11104-28-2	Aroctor-1221	BRL		µg/kg dry	19.2	1	н	10	n	11	n	X
11141-16-5	Aroclor-1232	BRL		µg/kg dry	19.2	1	n	11	•	Ħ	•	X
53469-21-9	Aroclor-1242	BRL		μg/kg dry	19.2	1	41	н	**		**	X
12672-29-6	Aroclor-1248	BRL		μg/kg dry	19.2	1	н	н	19	и	n	х
11097-69-1	Aroctor-1254	606		μg/kg dry	19.2	1	16	**	"	н	•	х
11096-82-5	Aroclor-1260	BRL		μg/kg dry	19.2	1 .	IF		н	ŧı	*1	X
37324-23-5	Aroclor-1262	BRL		μg/kg dry	19.2	1		**	Ħ		4	х
11100-14-4	Aroclor-1268	BRL		µg/kg dry	19.2	1	N	40	**	**		X
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	61			30-150 %		Ŋ	11	n	ıt	19	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	71			30-150 %		н	н	41		10	
2051-24-3	Decachlorobiphenyl (Sr)	54			30-150 %		**	н	. `			
2051-24-3	Decachlorobiphenyl (Sr) [2C]	54			30-150 %		**	n	19	10	Į4	
General C	hemistry Parameters											
	% Solids	99.3		%		1	SM2540 G Mod.	17-Mar-11	17-Mar-11	BD	1104690	

Sample Id 44-SC SB25773	-44			<u>t Project #</u> 5.1000.000	0	<u>Matrix</u> Asphalt		ection Date -Mar-11 00			ceived Mar-II	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolat	ile Organic Compounds by GC						•					
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		µg/kg dry	19.0	1	SW846 8082A	18-Mar-11	24-Mar-11	TG	1104724	X
11104-28-2	Aroclor-1221	BRL		µg/kg dry	19.0	1	п	*1	ы	*		X
11141-16-5	Aroclor-1232	BRL	•	μg/kg dry	19.0	1	**	er er	•	*		X
53469-21-9	Aroclor-1242	BRL		µg/kg dry	19.0	1	**	**	••	и	**	Х
12672-29-6	Aroclor-1248	BRL		µg/kg dry	19.0	1	н	17	w	*	н	X
11097-69-1	Aroclor-1254	653		µg/kg dry	19.0	1	**	M	**	н		X
11096-82-5	Aroclor-1260	BRL		µg/kg dry	19.0	1	11	n	n	н	н	X
37324-23-5	Aroclor-1262	BRL		µg/kg dry	19,0	1	4r		14	н		X
11100-14-4	Aroclor-1268	BRL		μg/kg dry	19.0	1	Ħ	н	n	ч	п	×
Surrogate	recoveries:									**-		
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	59			30-150 %		10	n	Ħ	44	11	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	71			30-150 %			н	*1	"	#	
2051-24-3	Decachlorobiphenyl (Sr)	51			30-150 %			**	u	**	**	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	50			30-150 %		н	ч	u	17		
General C	hemistry Parameters											
	% Solids	99.0		%		1	SM2540 G Mod.	17-Mar-11	17-Mar-11	BD	1104690	

Sample Id 45-SC SB25773-	dentification			<u>st Project #</u> 5.1000.000		<u>Matrix</u> Asphalt		ection Date -Mar-11 00			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert
Semivolati	le Organic Compounds by GC											
	nated Biphenvis by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		µg/kg dry	19.6	1	SW846 8082A	18-Mar-11	24-Mar-11	TG	1104724	х
11104-28-2	Aroclor-1221	BRL		μg/kg dry	19.6	. 1		**	n	4	•	X
11141-16-5	Aroclor-1232	BRL		μg/kg dry	19.6	1	·	и	H	н	H	х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	19.6	1	н	"	**	*	•	Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	19.6	1	a	н	н	н	**	X
11097-69-1	Aroclor-1254	299		µg/kg dry	19.6	1	**	•	**	*	**	X
11096-82-5	Aroclor-1260	BRL		µg/kg dry	19.6	1	n	4	19	18		X
37324-23-5	Aroclor-1262	BRL		µg/kg dry	19.6	1	10	•	14	<b></b>	#	Х
11100-14-4	Aroclor-1268	BRL		µg/kg dry	19.6	1	16		и	"	"	X
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	65			30-150 %		N	н	ч	*1		
10388-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	70			30-150 %		н	н	. "		*	
2051-24-3	Decachlorobiphenyl (Sr)	55			30-150 %			•	**	w	14	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	58			30-150 %		lt	11	н	11	11	
General C	hemistry Parameters											
	% Solids	99.3		%		1	SM2540 G Mod.	17-Mar-11	17-Mar-11	BD	1104690	

Sample Id 46-SC SB25773-	dentification 46			t <u>Project #</u> 5.1000.000	0	<u>Matrix</u> Asphalt		ection Date -Mar-11 00		_	ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	CerL
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	19.6	1	SW846 8082A	18-Mar-11	24-Mar-11	TG	1104724	X
11104-28-2	Aroclor-1221	BRL		μg/kg đry	19.6	1	**	Ħ	**	"	41	X
11141-16-5	Aroclor-1232	BRL		μg/kg dry	19.6	1	16	н	n	•	н	X
53469-21-9	Aroclor-1242	BRL		µg/kg đry	19.6	1	14	н	u	#	17	X
12672-29-6	Araclor-1248	BRL		µg/kg dry	19.6	1	н	••	n	**	u	X
11097-69-1	Aroclor-1254	1,520		µg/kg dry	19.6	1	n	71	н	19	w	X
11096-82-5	Aroclor-1260	BRL		µg/kg dry	19.6	1	n	**	н	*	н	X
37324-23-5	Aroclor-1262	BRL		µg/kg dry	19.6	1	н	**	н	н	14	X
11100-14-4	Aroclor-1268	BRL		µg/kg dry	19.6	1	M	**	•		н	X
Surrogate i	recoveries:										·····	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	79			30-150 %		n	**	*1			
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	87			30-150 %		н	tr.	a	19	н	
2051-24-3	Decachlorobiphenyl (Sr)	65			30-150 %		n	11	11	н	н	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	73			30-150 %		н	10	u	**	ø	
General C	hemistry Parameters											
	% Solids	99.2		%		1	SM2540 G Mod.	17-Mar-11	17-Mar-11	BD	1104690	

47-SC	325773-47		***************************************	<u>t Project #</u> 5.1000.000		<u>Matrix</u> Asphalt		ection Date -Mar-11 00			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		µg/kg dry	19.3	1	SW846 8082A	18-Mar-11	24-Mar-11	TG	1104724	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	19.3	1	**	n.		*	10	X
11141-16-5	Aroclor-1232	BRL		μg/kg dry	19.3	1	**	п	N	H	**	Х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	19.3	1	*	14	**	•	**	X
12672-29-6	Aroclor-1248	BRL		µg/kg dry	19.3	1	H	н •	H	H	п	Х
11097-69-1	Aroclor-1254	327		μg/kg dry	19.3	1	н	н	*1	п	н	X
11096-82-5	Aroclor-1260	BRL		μg/kg dry	19.3	1	N		M	н	n	X
37324-23-5	Aroclor-1262	BRL		μg/kg dry	19.3	1	н	11			ti	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	19.3	1	"	**	*	*1	77	х
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	59			30-150 %		11	"		14	**	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	67			30-150 %		I¢	(1	и	"	17	
2051-24-3	Decachlorobiphenyl (Sr)	49			30-150 %			**	n		10	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	50			30-150 %			H	н	п	17	
General C	hemistry Parameters											
	% Solids	99.3		%		1	SM2540 G Mod.	17-Mar-11	17-Mar-11	BD	1104690	

Sample Identification 48-SC SB25773-48			Client Project # 181125.1000.0000				lection Date/Time 5-Mar-11 00:00		Received 17-Mar-11			
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	54.1	1	SW846 8082A	18-Mar-11	24-Mar-11	TG	1104724	X
11104-28-2	Aroclor-1221	BRL		µg/kg dry	54.1	1	16	**	*1	н		X
11141-16-5	Aroclor-1232	BRL		µg/kg dry	54.1	1	u	и	41	н	н	X
53469-21-9	Aroclor-1242	BRL		µg/kg dry	54.1	1	H	**	"	u	*1	X
12672-29-6	Aroclor-1248	BRL		µg/kg dry	54.1	1	н	Ħ	n	7	н	X
11097-69-1	Aroclor-1254	85.1		µg/kg dry	54.1	1	n	м	**	"	**	X
11096-82-5	Arador-1260	BRL		µg/kg dry	54.1	1	n		ч	**	н	X
37324-23-5	Aroclor-1262	BRL		µg/kg dry	54,1	1	п	<b>9</b> 1	**	*1	•	X
11100-14-4	Aroclor-1266	BRL		µg/kg dry	54.1	1	и			**	"	X
Surrogate i	ecoveries:											*
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	89			30-150 %		**	11		41	я	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	97			30-150 %		al	11	10	11	41	
2051-24-3	Decachlorobiphenyl (Sr)	111			30-150 %		**	11	M	**	**	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	119			30-150 %		W.	44	•	ď	ur.	
General C	hemistry Parameters											
	% Solids	98.1		%		1	SM2540 G Mod.	17-Mar-11	17-Mar-11	BD	1104690	

Sample Identification 64-sc SB25896-15			Client Project # 181125.1000.0000					ection Date/Time 3-Mar-11 10:07		Received 21-Mar-11		
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C	,		·								
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0549	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104883	Х
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0549	1	**	и	*	n	•	Х
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0549	1	**	W	ıı	н	н	Х
53469-21 <i>-</i> 9	Aroclor-1242	BRL		mg/kg dry	0.0549	1	19	**	*	*	ď	Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0549	1	н	ŧI	н	•		Х
11097-69-1	Aroclor-1254	0.917		mg/kg dry	0.0549	1	Ħ	**	n	*	*	Х
11096-62-5	Aroclor-1260	BRL		mg/kg dry	0.0549	1	ur .	11	*	н		Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0549	1	10	н	м	, н	19	Х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0549	1	10	н	. 14	ч	н	Х
Surrogate i	ecoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	122			30-150 %		п	"	н	¥f	н	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	95			30-150 %		н	Ħ	•	•	"	
2051-24-3	Decachlorobiphenyl (Sr)	107			30-150 %		**	**	44	11	•	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	86			30-150 %		91		н	0	4	
General Chemistry Parameters												
	% Solids	98.3		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104942	

Sample Id 65-sc SB25896-	entification 16			t Project # 5.1000.0000		<u>Matrix</u> Concrete		ction Date. -Mar-11 10			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C		•									
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0660	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104883	X
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0660	1	e e	Ħ	It	Ħ	н	X
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0660	1	4	11	н	**	**	Х
53469-21-9	Arocior-1242	BRL		mg/kg dry	0.0660	· 1	н	н			16	Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0660	1	я	*	• .	. "	н	X
11097-69-1	Aroclor-1254	1.00		mg/kg dry	0.0660	1	**	**	п	•	*1	Х
11096-82-5	Aroctor-1260	BRL		mg/kg dry	0.0660	1	n	ır	н	4	**	Χ
37324-23-5	Aroclor-1262	BRL		mg/kg dry`	0.0660	1	н	•	н	"	**	Х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0660	1	ч	н	10	и	п	X
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	130			30-150 %		l#	, <b>n</b>	Ħ	49	41	
10386-84-2	4,4-DB-Octafluorobipheпуl (Sr) [2C]	98			30-150 %		"	14	•	"	и	
2051-24-3	Decachlorobiphenyl (Sr)	98			30-150 %		•	н	#	н	19	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	101			30-150 %		4	н	11	н	н	

General Chemistry Parameters % Solids

98.3

SM2540 G Mod. 22-Mar-11 22-Mar-11 GMA 1104942

Sample Id 66-sc SB25896-	lentification			: <u>Project #</u> .1000.0000	)	<u>Matrix</u> Concrete		ction Date -Mar-11 10			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0684	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104883	Х
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0,0684	1	u	લ	ŧI	н		X
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0684	1	•	**	"	•	14	Х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0684	1	н	at .	10	47	•	Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0684	1	н	11	н	**	41	X
11097-69-1	Aroclor-1254	BRL		mg/kg dry	0.0684	1	•	•	*	11	**	Х
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0684	1	10	'n	**	н	le .	Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0684	1	10	•	14	•		х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0684	1	н	10	11	**	н	x
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	126			30-150 %		•	H	**	н	**	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	97			30-150 %		**	Ħ	**	н	**	
2051-24-3	Decachlorobiphenyl (Sr)	103			30-150 %		10	•		4		
2051-24-3	Decachlorobiphenyl (Sr) [2C]	102			30-150 %		n	10		ď	10	
General C	hemistry Parameters											
	% Solids	96.9		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104942	:

Sample Id	entification			<u>t Project #</u> 5.1000.0000	)	Matrix Concrete		ction Date			ceived Mar-11	
SB25896-	18				-	. \$1						
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0586	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104883	X
11104-28-2	Arocior-1221	BRL		mg/kg dry	0.0586	1	41	н	it	#	<b>59</b>	X
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0586	1	P	u	4	41		Х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0586	1	n	10	•	и		Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0586	1	н		**	N	41	Х
11097-69-1	Aroclor-1254	0.507		mg/kg dry	0.0586	1	11	**		**	44	Х
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0586	1	10	п	н	U	11	Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0586	1		10	**	"	н	X
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0,0586	1	•	11	**	н	**	Х
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	118			30-150 %		Ħ	н	н	**	10	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	91			30-150 <b>%</b>		н		ď	н	н	
2051-24-3	Decachlorobiphenyl (Sr)	99			30-150 %		11	**	"	a	•	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	90			30-150 %		14	11	**	**	u	
General C	hemistry Parameters											
	% Solids	96.3		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104942	<u>!</u>

Sample Id 68-sc SB25896-	lentification 19			<u>t Project #</u> .1000.000	)	Matrix Concrete		ction Date Mar-11 10		_	ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC						!					
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Arodor-1016	BRL		mg/kg dry	0.0641	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104883	X
11104-28-2	Arodor-1221	BRL		mg/kg dry	0.0641	1	**		H	11	11	X
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0641	1	*	н	11	11	N	Х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0641	1	**	**	10	-	• • • • • • • • • • • • • • • • • • • •	Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0641	1	**	**	14	Ħ	**	X
11097-69-1	Aroclor-1254	BRL		mg/kg dry	0.0641	1		"	н	**		Х
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0641	1	н .	*	44	1)·	н	Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0641	1	н	**	10			Х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0641	1	н	11	19	н	**	X
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	120			30-150 %		47	n	н	•	10	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	94			30-150 %		10	H	π	*	10	
2051-24-3	Decachlorobiphenyl (Sr)	101			30-150 %		н	**	**		н	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	92			30-150 %		н	11*	n	Ħ	**	
General C	hemistry Parameters											
	% Solids	97.5		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104942	1

Sample Id 69-sc SB25896-	entification 20			t Project # .1000.000	)	<u>Matrix</u> Concrete		ction Date Mar-11 10			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0598	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104883	Х
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0598	1	u	N	#	**	Ħ	Х
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0598	1	H	#F	н	"	**	Х
53469-21-9	Arodor-1242	BRL		mg/kg dry	0.0598	1	•	н	н	**	10	X
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0598	1	18	u	**	tt	н	X
· 11097-69-1	Aroclor-1254	BRL		mg/kg dry	0.0598	1	a	*	н	н	17	Х
11096-82-5	Aroctor-1260	BRL		mg/kg dry	0.0598	1	er	н	w	u		Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0598	1		u	**	n	•1	Х
11100-14-4	Aroclar-1268	BRL		mg/kg dry	0.0598	1	M	n	n	н	"	Х
Surrogate i	ecoveries:					•						
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	117			30-150 %		10	•	n		н	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	100			30-150 %		н	11	π	И	rı	
2051-24-3	Decachlorobiphenyl (Sr)	98			30-150 %		n	н	**	**	**	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	90			30-150 %		10	#1	n	11	n	
General C	hemistry Parameters											
	% Solids	98.0		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104942	<u>.</u>

Sample Ide 70-sc SB25896-	entification 21			t <u>Project #</u> 5.1000.0000	)	<u>Matrix</u> Concrete		ction Date. -Mar-11 10			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert
Polychlorii	le Organic Compounds by GC nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0630	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104863	X
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0630	1		11	"	10	17	X
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0630	1		m	4		н	X
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0630	1	•	47	н		**	X
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0630	1		n	u	н	н	х
11097-69-1	Aroclor-1254	0.149		mg/kg dry	0.0630	1	•	**	19	II;	н	X
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0630	1	я	(4	н		10	х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0630	1	я	*	10	н	, н	X
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0630	1	4	**	п	"	**	x
Surrogate i	recoveries:							·				
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	120			30-150 %		11	**	M	**	*	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	92			30-150 %		и .	п	н	H	**	
2051-24-3	Decachlorobiphenyl (Sr)	107			30-150 %		*	11	#	#	н	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	85			30-150 %		11	'n	ŧı	н	41	
General C	Chemistry Parameters											
	% Solids	97.2		%		1	SM2540 G Mod	22-Mar-11	1 22-Mar-11	GMA	1104942	2

Sample Id	entification		Clien	t Project#		Matrix	<u>Colle</u>	ction Date	/Time	<u>Re</u>	ceived	
71-sc SB25896-	22		18112	5.1000.0000	)	Concrete	: 18-	-Mar-11 10	):45	21-	Mar-II	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0606	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104683	Х
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0606	1.	H	**		ìr	-	Х
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0606	1	-	**	н	н		X
53469-21-9	Aroclor-1242	BRL .		mg/kg dry	0.0606	1	**	*	*	*	11	Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0606	1	4	и	10	#		Х
11097-69-1	Aroclor-1254	BRL		mg/kg dry	0.0606	1		Ħ			"	Х
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0606	1	*	•	Tf.	н	ч	X
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0606	1	"	**	40	"	n	Х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0606	1	<b>10</b>	и	19	11	11	X
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	127			30-150 %		и	**	•	Ħ	**	
10386-84-2	4,4-DB-Octafluorobiphenyi (Sr) [2C]	95			30-150 %		11	11	4	н	**	
2051-24-3	Decachlorobiphenyl (Sr)	108			30-150 %		*	*	10	**	#	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	89			30-150 %		tt	н	н	10	14	
General C	hemistry Parameters											
	% Solids	97.6		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104942	<u>!</u>

Sample Id 72-sc SB25896-	entification 23			t Project # i.1000.0000	)	<u>Matrix</u> Concrete		ction Date Mar-11 10			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Arodor-1016	BRL		mg/kg dry	0.0599	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104883	X
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0599	1	ч .	e	п	*		Х
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0599	1	tt	**	и	#	N	Х
53469-21-9	Aroctor-1242	BRL		mg/kg dry	0.0599	1	•	**		**		Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0599	1	4	н	4	н	IF	Х
11097-69-1	Aroclor-1254	0.0943		mg/kg dry	0.0599	1	**	•	14	•	н	Х
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0599	1	11	10	ff		**	Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0599	1	**	н	•	н	4	X
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0599	1	**	и	н			Х
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	111			30-150 %		. н	d	4		H	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	86			30-150 %		4	Ħ	н	*	H	
2051-24-3	Decachlorobiphenyl (Sr)	104			30-150 %		- "	19	•		н	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	83			30-150 %		н	н	**	п	п	
General C	hemistry Parameters											
	% Solids	97.5		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104942	:

73-sc SB25896-	<u>lentification</u> 24			t Project.# 5.1000.0000	)	<u>Matrix</u> Concrete		ction Date Mar-11 10			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0574	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104883	Х
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0574	1	ţa.	H	n	п	#	Х
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0574	1	•	n	n	*	н	Х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0574	1	4	"	н	**	•	X
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0574	1	**			н	47	Х
11097-69-1	Aroclor-1254	0.105		mg/kg dry	0.0574	1	n	n	u	4	**	х
11096-82-5	Aroclor-1260	BRL		mg/kg dīy	0.0574	1	'n	н	#	Ħ	11	х
37324-23-5	Aroclor-1262	BRL		mg/kg dīy	0.0574	1	#1	**	10	11	.,	х
11100-14-4	Arodor-1268	BRL		mg/kg dry	0.0574	1	uf	47	н	Ħ	•	X
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	116			30-150 %		10	"	¥I	17	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	88			30-150 %		а	п	w	н	**	
2051-24-3	Decachlorobiphenyl (Sr)	109			30-150 %		**	11	10	70	**	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	90			30-150 %		**	10		1#	4	
General C	hemistry Parameters											
	% Solids	97.1		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104942	<u> </u>

<u>Sample Id</u> 74-sc SB25896-	entification 25			t <u>Project #</u> 5.1000.0000	)	<u>Matrix</u> Concrete		ction Date Mar-11 11			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC						•					
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0523	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104883	Х
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0523	1	*	н	**	**		X
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0523	1	n	Ħ	er	Ħ	**	Х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0523	1	**	4	11	н	14	X
12672-29-6	Aroctor-1248	BRL		mg/kg dry	0.0523	1	10	. н	-	**	ŧI	Х
11097-69-1	Aroclor-1254	0.565		mg/kg dry	0.0523	1	п.	#1	17	"	19	Х
11096-82-5	Aroctor-1260	BRL		mg/kg dry	0.0523	1	н	11		**	10	Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0,0523	1	ď	19	**	#	н	Х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0523	1	16		а	11	"	×
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	113			30-150 %		н	117		44	14	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	86			30-150 %		Ħ	u	a	at .	н	
2051-24-3	Decachlorobiphenyl (Sr)	95			30-150 %		11	н	11	н	**	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	92			30-150 %		н	91		ri	19	
General C	hemistry Parameters											
	% Solids	98.3		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104942	<u> </u>

Sample Id 75-sc SB25896-	entification 26			t Project # 5.1000.0000	)	Matrix Concrete	· · · · · · · · · · · · · · · · · · ·	ection Date Mar-11 11			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	8RL		mg/kg dry	0.0601	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104883	Χ
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0601	1	10	*1	п	**	**	Х
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0601	1	н	H	Ħ	н		X
53459-21-9	Aroclor-1242	BRL		mg/kg dry	0.0601	1	n	" .	**		н	X
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0601	1	10			н	**	X
11097-69-1	Aroclor-1254	0.235		mg/kg dry	0.0601	1	11	11	11	**	44	Х
11095-82-5	Aroclor-1260	BRL		mg/kg dry	0.0601	1	Ф	н	*1	**	н	X
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0601	1	te .	Ħ	u	н	**	Х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0,0601	1	*1	"	"	**	"	X
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	105			30-150 %		п	**	'n	n	**	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	84			30-150 %		el .	11	ŧı	**	10	
2051-24-3	Decachlorobiphenyl (Sr)	90			30-150 %		**	н	14		"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	74			30-150 %		n	er	п	, "	"	
General C	hemistry Parameters											
	% Solids	97.9		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104942	<u> </u>

Sample Id 76-sc SB25896-	entification 27			<u>t Project #</u> 5.1000.0000	)	<u>Matrix</u> Concrete	***********	ction Date -Mar-11 11		_	ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC										•	
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0547	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104883	Х
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0547	1	н	10	н	и		Х
11141-16-5	Arodor-1232	BRL		mg/kg dry	0.0547	1	#	н	4	**	н	Х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0547	1	#	**	*	14	**	Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0547	1	н	Ħ	н	н	10	Х
11097-69-1	Aroclor-1254	0.0700		mg/kg dry	0.0547	1	*	N	"	97		Х
11096-62-5	Aroclor-1260	BRL		mg/kg-dry	0.0547	1	**	71	10	h	**	Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0547	1	*	10	и	н	n	Х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0547	1	"	н	*	N	11	X
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	110			30-150 %		12	41	15	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	87			30-150 %		11	ì•	(1	н	tr	
2051-24-3	Decachlorobiphenyl (Sr)	100			30-150 %		н	n	**	11		
2051-24-3	Decachlorobiphenyl (Sr) [2C]	84			30-150 %		H .	а	10	10	н	
General C	hemistry Parameters											
	% Solids	96.9		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104942	:

Sample Id 77-sc SB25896-	entification 28			<u>Project #</u> 1000.0000	)	Matrix Concrete		ction Date. Mar-11 11			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0640	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104883	X
11104-28-2	Arodor-1221	BRL		mg/kg dry	0.0640	1	<b>v</b> f	11	н	**	*1	X
11141-16-5	Arodor-1232	BRL		mg/kg dry	0.0640	1	**	u	ч	It	at	Х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0640	1	. *	н		н	19	х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0640	1	*	•	н	Ħ	н	X
11097-69-1	Aroclor-1254	1.39		mg/kg dry	0.0640	1	п	rt	•	4		X
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0640	1	**	**	*	11	71	X
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0640	1	Ħ	н	19	н	**	X
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0640	1	4	Ħ	п	*	"	Х
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	108			30-150 %		u	**	**	16	н	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	84			30-150 %		¥f	ıt.	**		•	
2051-24-3	Decachlorobiphenyl (Sr)	96			30-150 %		17	"	u	*	••	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	130			30-150 %		n	n	n	н	10	
General C	hemistry Parameters											
	% Solids	98.5		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104942	

Sample Id 78-sc SB25896-	lentification			t Project # 5.1000.0000	)	<u>Matrix</u> Concrete		ection Date -Mar-11 11			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	CerL
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0611	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104883	X
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0611	1	n	*	n	н	н	Х
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0611	1	н	H	•	н	M	X
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0611	1	n	н	14	47	41	X
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0611	1	н	n	14	ŧŧ	**	X
11097-69-1	Aroclor-1254	0.0760		mg/kg dry	0.0611	1	10	*1	н	н	rŧ	X
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0,0611	1	H	IF.	•	н	н	X
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0611	1	н			•	н	X
11100-14-4	Aroclar-1268	BRL		mg/kg dry	0.0611	1	n	n	10	#1	н	X
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	123			30-150 %		19	11	eri	м		
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	98			30-150 %	,	10	10	11	н	"	
2051-24-3	Decachlorobiphenyl (Sr)	110			30-150 %		н		н	"	н	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	141			30-150 %		"	Ħ	п	11	ы	
General C	hemistry Parameters											
	% Solids	98.4		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104942	:

Sample Id 79-sc SB25896-	lentification			t Project # 5,1000,0000	)	<u>Matrix</u> Concrete	· · · · · · · · · · · · · · · · · · ·	ction Date Mar-11 11			ceived Mar-11	
CAS No.	Analytė(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Arodor-1016	BRL		mg/kg dry	0.0549	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104883	X
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0549	1	111	"	17	"		Х
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0549	1	M	я	II.	n	н	Х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0549	1	Ħ	н	п	N	W.	Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0549	1	u	•	*	Ħ	19	Х
11097-69-1	Aroclor-1254	8.78		mg/kg dry	0.0549	1	14	ti	÷τ	er .	14	Х
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0549	1	•	**	14	4	**	Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0549	1	и	II.	19	и	н	Х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0549	1	н	n	*1	n	"	X
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	124			30-150 %		н	**	10	"	н	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	96			30-150 %		н	41	н	46	fi	
2051-24-3	Decachlorobiphenyl (Sr)	111			30-150 %		**	н	•	н	н	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	99			30-150 %		**	n	•	•	**	
General C	hemistry Parameters											
	% Solids	97.2		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104942	

Sample Id 80-sc SB25896-	lentification			t <u>Project #</u> 5.1000.0000		Matrix Concrete		ction Date. Mar-11 11			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	lle Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0570	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104883	Х
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0570	1		n	и	•		Х
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0,0570	1	n	'n	u	HF.	Ħ	Х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0570	1	н	*1	#	**	4	Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0570	1	**	10	н	н	•	X
11097-69-1	Aroclor-1254	0.0755		mg/kg dry	0.0570	1	**		**	"	te	X
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0570	1	Ħ	н	11	**	4	Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0570	1	н	н	н	11	4	X
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0570	1	"	10	н	-	10	Х
Surrogate	recoveries:											
10386-84-2	4,4-D8-Octafluorobiphenyl (Sr)	113			30-150 %		11	N	11	**	н	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	96			30-150 %		N	*	10	*	N	
2051-24-3	Decachlorobiphenyl (Sr)	105	•		30-150 %		·r		и	н	12	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	93			30-150 %		o	**	et	н	10	
General C	hemistry Parameters											
	% Solids	97.5		<b>%</b> .		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104943	i

Sample Id 81-sc SB25896-	dentification -32			t <u>Project #</u> 5.1000.0000	)	<u>Matrix</u> Concrete		ection Date -Mar-11 11			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12874-11-2	Aroclor-1016 .	BRL		mg/kg dry	0.0615	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104883	X
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0615	1	10	41	11	11	н	X
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0615	1	•	10	н	n	н	X
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0615	1	н	"	**	н ,	4	X
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0615	1	et	Ħ	п	ŧř	4	X
11097-69-1	Aroclor-1254	0.0908		mg/kg dry	0.0615	1	**	4	н	"	*	X
11098-82-5	Aroclor-1260	BRL		mg/kg dry	0.0615	1	11	47	*	•	н	X
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0615	1	н	14		*	*	X
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0615	1	н	. "	11	4	**	х
Surrogate i	recoveries;											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	119			30-150 %		91	q	н	•	u	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	96			30-150 %		er	11	Ħ	"	u	
2051-24-3	Decachlorobiphenyl (Sr)	102			30-150 %		н	n	**	н	u	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	78			30-150 %	•	n	н	Ħ	ч	**	
General C	hemistry Parameters											
	% Solids	97.7		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104943	

Sample Ic 82-sc SB25896-	-33			<u>t Project #</u> 5.1000.0000	)	<u>Matrix</u> Concret		ection Date -Mar-11 11			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	inated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0607	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104885	Х
11104-28-2	Arocior-1221	BRL		mg/kg dry	0.0607	1	n	**	a	•	н	Х
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0607	1	16	#	Ħ	н	н	Х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0607	1	м	10	#	•	4	Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0607	1	н	и	н	п	**	Х
11097-69-1	Aroclor-1254	BRL		mg/kg dry	0.0607	1	•	"	**	*	10	Х
11096-82-5	Arocior-1260	BRL		mg/kg dry	0.0607	1	н	н	16	н	10	Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0607	1	**	*			•	X
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0607	1	er er	*1	11	-	14	X
Surrogate :	recoveries;										***************************************	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	112			30-150 %		μ	*	н	н	n	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	85			30-150 %		P	#		•	н	
2051-24-3	Decachlorobiphenyl (Sr)	108	•		30-150 %		n	*	н	н	69	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	118			30-150 %		н	n	H	•	н	
General C	hemistry Parameters											
	% Solids	97.7		%		. 1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104943	,

	lentification .		Clien	ıt Project #		Matrix	Colle	ection Date	/Time	Re	ceived	
83-sc SB25896-	-34		18112	5.1000.000	)	Concrete	e 18	-Mar-11 11	1:50	21-	Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C								7			
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0557	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104885	Х
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0557	1		н	#	**	*	Х
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0557	1	•	**	le .	11	**	Х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0557	1	Ħ	•	н	Ħ	и	Х
12672-29-6	Arodor-1248	BRL		mg/kg dry	0.0557	.1	п		н	n	19	Х
11097-69-1	Arocior-1254	0.0868		mg/kg dry	0.0557	1	**	10	н	н	н	Х
11096-82-5	Arocior-1260	BRL		mg/kg dry	0.0557	1	11	н	**	4	"	Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0557	1	н	н	11	*	a	Х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0557	1	н	n	•	**	**	х
Surrogate	recoveries;											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	106			30-150 %		*	10	"	**	**	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	82			30-150 %		н	49	н	н	И	
2051-24-3	Decachlorobiphenyl (Sr)	89			30-150 %		19	N	"	M	H	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	77			30-150 %		10	н	**	**	н	
General C	hemistry Parameters											
	% Solids	97.4		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104943	,

84-sc SB25896-	entification 35		***************************************	<u>t Project #</u> .1000.000(	)	<u>Matrix</u> Concrete		ection Date -Mar-11 11			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0598	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104885	Х
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0598	1	Ħ	**	11	н	u	Х
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0598	1	•	n	10	*	•	X
53469-21-9	Aroclor-1242	BRL	*	mg/kg dry	0.0598	1	•	н		н	•	X
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0598	1	41	н	H	•	IF	Х
11097-69-1	Aroclor-1254	BRL		mg/kg dry	0,0598	1	10	**	н	•	14	Х
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0598	1	н	æ	u	45	H	X
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0598	1	**	11	**		ы	Х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0598	1	н	N	**	u	#1	X
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	122			30-150 %		11	н	н	"	11	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	93			30-150 %		Ħ	**	п	. "	"	
2051-24-3	Decachlorobiphenyl (Sr)	107			30-150 %			•		#	n	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	98			30-150 %		н	n	**	n	н	•
General C	hemistry Parameters											
	% Solids	97.7		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104943	

Sample Id 85-sc SB25896-	entification 36			<u>t Project #</u> 5.1000.000	o	<u>Matrix</u> Concrete		ection Date -Mar-11 12		-	ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											,
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0631	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104885	Х
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0631	1	**	. "	` a	*	**	Х
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0631	1	11	a	10	**	н	X
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0631	1	N	**				Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0631	1	н	н	n		R	Х
11097-69-1	Aroclor-1254	0.484		mg/kg dry	0.0631	1	Ħ	н	**	н	н	Х
11096-82-5	Arodor-1260	BRL		mg/kg dry	0.0631	1	44	tr	11	, п	14	Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0631	1	11	n	19	11	н	Х
11100-14-4	Aroclar-1268	BRL		mg/kg dry	0.0631	1	14	**	n		н	X
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	118		-	30-150 %		•	H	•	н	я	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	95			30-150 %		н	•	er	н	10	
2051-24-3	Decachlorobiphenyl (Sr)	101			30-150 %		**	**	te	"		
2051-24-3	Decachlorobiphenyl (Sr) [2C]	93			30-150 %		IF	11	н	Ħ	н	
General C	hemistry Parameters											
	% Solids	98.3		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104943	

Sample Id 86-sc SB25896-	lentification			<u>t Project #</u> 5.1000.0000		<u>Matrix</u> Concrete		ection Date -Mar-11 12			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert
Semivolati	ile Organic Compounds by GC											
·	nated Biphenvis by SW846 8082 by method SW846 3540C								,			
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0596	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104885	×
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0596	1	ч	•	**	**	*	X
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0596	1	44	H	н	•	•	X
53459-21-0	Aroclor-1242	BRL		mg/kg dry	0.0596	1		"	et .	N	10	X
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0596	1	•	11	10	**	н	Х
11097-69-1	Aroclar-1254	0.553		mg/kg dry	0.0596	1	#	u	19	10	**	Х
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0596	1	H	п	н	u		х
37324-23-5	Aroclar-1262	BRL		mg/kg dry	0.0596	1	<b>H</b>	•	41	н	н	х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0596	1	**	n	16	•	"	×
Surrogate .	recoveries:						***************************************					
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	83	•		30-150 %		14	u	•	19		
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	66			30-150 %		н	ŧ	#I	а	u	
2051-24-3	Decachlorobiphenyl (Sr)	72			30- <b>15</b> 0 %		# <sup>*</sup>	u	н		**	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	62			30-150 %		i+	••	rı	11	w	
General C	hemistry Parameters											

% Solids

98.2

SM2540 G Mod. 22-Mar-11 22-Mar-11 GMA 1104943

Sample Id 87-sc SB25896-	dentification 38			<u>: Project #</u> .1000.0000	)	<u>Matrix</u> Concrete	-	ction Date Mar-11 12			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert
Semivolati	ile Organic Compounds by GC											
	nated Biphenvis by SW846 8082 by method SW846 3540C					4						
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0610	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104885	X
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0610	1		н	**	•	**	X
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0610	1	ч	*1	н	н	н	Х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0610	1	Ħ	•	**	•	स	X
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0610	1	и		w	10	н	X
11097-69-1	Aroclor-1254	BRL		mg/kg dry	0.0610	1	16	n	н	н		Х
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0610	1	н	4	••	•	н	X
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0610	1	н	**	•	4	н	Х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0,0610	1	π	**	u	**	*1	X
Surrogate	recoveries:										•	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	129			30-150 %		16	н	ti .	н	и	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	99			30-150 %		н	et	Ħ	ri	н	
2051-24-3	Decachlorobiphenyl (Sr)	110			30-150 %		. "	**		**	•	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	98			30-150 %		**	IJ	н		п	
General C	hemistry Parameters											
	% Solids	97.3		%		1	SM2540 G Mod.	22-Маг-11	22-Mar-11	GMA	1104943	

<u>Sample Id</u> <b>88-sc</b> SB25896-	entification 39			t Project # 5.1000.000	)	Matrix Concrete		ction Date Mar-11 12			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Arodor-1016	BRL		mg/kg dry	0.0535	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104885	X
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0535	1	н	н	н	н	н	X
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0535	1	и	**	11	*	**	Х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0535	1	и	H	М	14		Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0535	1	41	**	14	н	н	Х
11097-69-1	Aroclor-1254	0.639		mg/kg dry	0.0535	1	18	n	н	e	Ħ	Х
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0535	1	*1	n	•		10	Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0535	1	19	Ħ	**	н	N	Х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0535	1	"		Ħ	**	"	X
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	123			30-150 %		"	п	•	н	н	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	95			30-150 %		10	tt.		"	"	
2051-24-3	Decachlorobiphenyl (Sr)	105			30-150 %		н	"	**	19	17	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	95			30-150 %		**	н	*	н	19	
General C	hemistry Parameters										•	
	% Solids	98.6		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104943	3

Sample Id 89-sc SB25896-	entification 40			<u>: Project #</u> .1000.0000	)	Matrix Concrete		ction Date Mar-11 12			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0623	1	SW846 8082A	21-Mar-11	24-Mar-11	ŞM	1104885	Х
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0623	1	•	19	п	u	"	Х
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0623	1	н	н	*	41	m	X
53469-21-9	Arodor-1242	BRL		mg/kg dry	0,0623	1	*		**	ď	n	X
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0623	1	**	•	•	n	**	X
11097-69-1	Aroclor-1254	BRL		mg/kg dry	0.0623	1	**	•		н	н	X
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0623	1	10				•	Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0623	1	н	u		tf	**	X
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0623	1	н	**	11	н	n	X
Surrogate i	ecoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	126			30-150 %		4	11	*	•	**	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	98			30-150 %		19	N	Ħ	#	**	
2051-24-3	Decachlorobiphenyl (Sr)	108			30-150 %		v	•	**	•	**	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	92			30-150 %		и	er er	**	ıŧ	10	
General C	hemistry Parameters											
	% Solids	98.1		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104943	ı

Sample Id 90-sc SB25896-	dentification -41			<u>t Project #</u> 5.1000.000	)	<u>Matrix</u> Concrete		ection Date -Mar-11 12			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenvis by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0668	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104885	Х
11104-28-2	Arodor-1221	BRL		mg/kg dry	0.0668	1	н .	•	11	ч	H	Х
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0668	1	71		**	**	н	Х
53469-21-9	Aroclor-1242	BRL	•	mg/kg dry	0.0668	1	**	10	41	**	и	Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0668	1	91	ıt	и	*1	14	Х
11097-69-1	Aroclor-1254	BRL		mg/kg dry	0.0668	1	41	N	11	•	Ħ	X
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0668	1	u	и	n		п	Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0668	1	47		н		н	Х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0668	1	11	н	, n		'n	х
Surrogate i	recoveries:											~
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	119			30-150 %		-	n	n		n	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	94			30-150 %		¥	н	**		ч	
2051-24-3	Decachlorobiphenyl (Sr)	103			30-150 %		10	**	tr	н		
2051-24-3	Decachlorobiphenyl (Sr) [2C]	88			30-150 %		17	н		n		
General C	hemistry Parameters											
	% Solids	97.3		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104943	

Sample Io 91-sc SB25896	dentification -42			nt Project # 5.1000.000	0	<u>Matrix</u> Concret		ection Date -Mar-11 13			<u>ceived</u> Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolat	ile Organic Compounds by GC											
	inated Biphenyls by SW846 8082 by method SW846 3540C			,								
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0618	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104885	x
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0618	1	**	*		н	, "	x
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0618	1	19	•	и	н	н	х
53469-21-9	Aroclar-1242	BRL		mg/kg dry	0.0618	1	12	•	н	н	я	x
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0618	1	11		*	44	44	х
11097-69-1	Aroclor-1254	BRL		mg/kg dry	0.0618	1	44	u	n	п	111	X
11096-82-5	Aroclar-1260	BRL		mg/kg dry	0.0618	1	17	Ħ	н	н	**	X
37324-23-5	Aroclar-1262	BRL		mg/kg dry	0.0618	1		н	п	10	**	X
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0618	1	र्ग	а	N		**	X
Surrogate i	recoveries:		-	7000			·				<del></del>	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	115			30-150 %		н	н	**		н	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	91			30-150 %		N	"		. н	н	
2051-24-3	Decachlorobipheπyl (Sr)	102			30-150 %		10	ŧr	**	н	16	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	90			30-150 %		4	•	н			
General C	hemistry Parameters											
	% Salids	97.8		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104943	

Sample Id 92-sc SB25896-	dentification -43			<u>t Project #</u> 5.1000.0000	)	<u>Matrix</u> Concrete		ection Date -Mar-11 13			<u>ceived</u> Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC										*	
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0521	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104885	X
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0521	1	**	10	**	17	н	х
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0521	1	78	n	11	10		х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0521	1	**	*	**	10	н	х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0521	1	N	н	n	te .	14	х
11097-69-1	Aroclor-1254	0.332		mg/kg dry	0.0521	1	•	19			•	X
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0521	1	•	н	n	н	н	х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0521	1	n	н :	n		•	X
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0521	1	м	•	H	н	**	X
Surrogate i	recoveries:		111-0-1								******	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	122			30-150 %		n	н		14	н	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	96			30-150 %		н	n	14	н	11	
2051-24-3	Decachlorobiphenyl (Sr)	107			30-150 %		**	**	11	"	49	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	79			30-150 %		n	N	**	**	10	

General Chemistry Parameters % Solids

97.8

SM2540 G Mod. 22-Mar-11 22-Mar-11 GMA 1104943

Sample Id 93-sc SB25896-	dentification 44			t Project # 5.1000.0000	)	<u>Matrix</u> Concrete		ction Date Mar-11 13		_	ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroctor-1016	BRL		mg/kg dry	0.0618	1	SW846 B0B2A	21-Mar-11	24-Mar-11	SM	1104885	Х
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0618	1	N	"	n	. n		X
11141-16-5	Arodor-1232	BRL		mg/kg dry	0.0618	1	M	н			•	Х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0618	1	*1	м	••	**	10	X
12672-29-6	Araclor-1248	BRL		mg/kg dry	0.0618	1	*	n	10	н	4	X
11097-69-1	Arador-1254	BRL		mg/kg dry	0,0618	1	10	**	**	•	•	X
11095-82-5	Aroclor-1260	BRL		mg/kg dry	0.0618	1	н	tr.	н	**	**	X
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0618	1	•	н	11	•	11	Х
11100-14-4	Aroclor-1268	BRL .		mg/kg dry	0.0618	1	**	. "	11	10	п	х
Surrogate i	ecoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	118			30-150 %		н	H	Ħ	**	•	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	98			30-150 %		и	н	11	17	••	
2051-24-3	Decachlorobiphenyl (Sr)	112			30-150 %		11	*1	**	**		
2051-24-3	Decachlorobiphenyl (Sr) [2C]	87			30-150 %		n	n	N	'n	н	
General C	hemistry Parameters								3			
	% Solids	97.9		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104943	,

Sample Id 94-sc SB25896-	entification 45			t Project # 5.1000.0000	)	<u>Matrix</u> Concrete	******	ction Date Mar-11 13			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Ceri.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0646	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104885	Х
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0646	1	*1	H	*	*	**	Х
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0646	1	ır	н	n	u		Х
53469-21- <del>9</del>	Aroclor-1242	BRL		mg/kg dry	0.0646	1	íe .	н	*	17	n	Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0646	1	H	Pt	н	и	71	Х
11097-69-1	Aroclor-1254	0.421		mg/kg dry	0.0646	1	•	*	•	"	•	Х
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0646	1	. "	#	11	н	11	X s
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0646	1	**	ħ	79			Х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0646	1		N		н	17	Х
Surrogate i	ecoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	108			30-150 %		n	н	и	#	12	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	84			30-150 %		17	*1	n	10	n	
2051-24-3	Decachlorobiphenyl (Sr)	97			30-150 %		19	47	•	19	14	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	84			30-150 %		н	**	ut	n	н	
General C	hemistry Parameters											
	% Solids	98.4		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104943	

Sample Id 95-sc SB25896-	<u>lentification</u> -46			<u> Project #</u> .1000.0000	)	<u>Matrix</u> Concrete		ection Date -Mar-11 13			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclar-1016	BRL		mg/kg dry	0.0599	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104885	Х
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0599	1	, "	-	19	н	4	Х
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0599	1	, "		н	<b>e</b> r	•	X
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0,0599	1	*	*	*	41	**	Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0599	1	н	N	4	11	Ħ	Х
11097-69-1	Aroclor-1254	0,156		mg/kg dry	0.0599	1	**	н	**	п	н	Х
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0599	1	**	•	**	N	н	Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0599	1	19	wt .	н	н	•	Х
11100-14-4	Arodor-1268	BRL		mg/kg dry	0.0599	1		**	н	**	"	х
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	111			30-150 %		•	10	•	"	**	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	88			30-150 %		et	ti	π	11	w	
2051-24-3	Decachlorobiphenyl (Sr)	101			30-150 %		•	N	er er		10	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	80			30-150 %		**	н	4	я	It	
General C	hemistry Parameters											
	% Solids	98.4		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104943	

Sample Id 96-sc SB25896-	entification 47			<u>t Project #</u> 5.1000.0000	)	<u>Matrix</u> Concrete		ection Date -Mar-11 13			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0645	1	SW846 8082A	21-Mar-11	25-Mar-11	SM	1104885	X
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0645	1	"	17	**	••	**	Х
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0645	1	4	n	**	9	0	X
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0645	1	я	•		•	н	Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0645	1	в	**	н	*	n	Х
11097-69-1	Aroclor-1254	0.0665		mg/kg dry	0.0645	1	н		u			Х
11096-82-5	Arodor-1260	BRL		mg/kg dry	0.0645	1	**	11	tr	**	10	Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0645	1	44	41	14	н	N	×
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0,0645	1	#	**	н	*	н	х
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	125			30-150 %		н	н	**	v	45	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	99			30-150 %		п		11		12	
2051-24-3	Decachlorobiphenyl (Sr)	106			30-150 %		" .	tr	и	"	н	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	92			30-150 %		. "	10	et	"	**	
General C	hemistry Parameters											
	% Solids	97.6		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104943	ı

Sample Id 97-Soil SB25896-	entification 48			<u>t Project #</u> .1000.0000	)	<u>Matrix</u> Soil		ection Date -Mar-11 13			<u>ceived</u> Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0239	1	SW846 8082A	21-Mar-11	25-Mar-11	SM	1104885	X
11104-28-2	Arodor-1221	BRL		mg/kg dry	0.0239	1	**	н	n	н	**	Х
11141-16-5	Arodor-1232	BRL		mg/kg dry	0.0239	1	#	**	**	*	м	X
53469-21-9	Arodor-1242	BRL		mg/kg dry	0.0239	1		4	11	#	*	Х
12672-29-6	Arodor-1248	BRL		mg/kg dry	0.0239	1	н		н		44	Х
11097-69-1	Arodor-1254	1.42		mg/kg dry	0.0239	1	ir	q	er er	н		Х
11096-82-5	Arodor-1260	BRL		mg/kg dry	0.0239	1	н	11	**	•	*	Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0239	1	н	n	н	Ħ	Ħ	Х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0239	1	н	*	н	Ħ	11	Χ
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	101			30-150 %		**	•	17	"	н	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	78			30-150 %		18	н	n	tt	н	
2051-24-3	Decachlorobiphenyl (Sr)	92			30-150 %		н	и	u	11	н	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	79			30-150 %		н	н			*1	
General C	hemistry Parameters											
	% Solids	80.4		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104943	

Sample Id 98-Soil SB25896-	entification 49			<u>t Project #</u> 5.1000.0000	)	<u>Matrix</u> Soil		ction Date Mar-11 13			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0234	1	SW846 8082A	21-Mar-11	25-Mar-11	SM	1104885	Х
11104-26-2	Aroclor-1221	BRL		mg/kg dry	0.0234	1	u.	14	H	10	**	X
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0234	1	н	н	"	н	-"	X
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0234	1	н	**	н	#	н	Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0234	1	**		*	10	#1	X
11097-69-1	Aroclor-1254	0.177		mg/kg dry	0.0234	1	10	н	и	Ħ	19	Х
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0234	1	ч	11	н	47	п	Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0234	1	u ·	N	er	н	4	X
11100-14-4	Arodor-1268	BRL		mg/kg dry	0.0234	1	H		н	n	11	×
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	110			30-150 %		11	•	**	,	•	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	86			30-150 %		п	at.	Ħ	•	**	
2051-24-3	Decachlorobiphenyl (Sr)	105			30-150 %		11	и	er er	14	н	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	96			30-150 %		и	**	10	19	Ħ	
General C	hemistry Parameters											
	% Solids	79.1		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104943	j

Sample Io 99-Soil SB25896-	dentification -50			t Project # .1000.0000	)	<u>Matrix</u> Soil		ction Date Mar-11 13			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert
Polychlori	ile Organic Compounds by GC nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0234	1	SW846 8082A	21-Mar-11	25-Mar-11	SM	1104885	X
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0234	1	te	đ	**	"		X
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0234	1	e	18	н	n	Ħ	X
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0,0234	1	и		**	•	4	X
12672-29-6	Arocior-1248	BRL		mg/kg dry	0.0234	1	41	4	<b>tt</b>	nt	Je	X
11097-69-1	Aroclor-1254	2,20		mg/kg dry	0.0234	1	17	u	n	n		X
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0234	1	17	¥f	n	"	m	X
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0234	1	ħ	**	•	n	**	X
11100-14-4	Arocior-1268	BRL		mg/kg dry	0.0234	1	7		11		"	Х
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	138			30-150 %		1¢	wi	H	и	11	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	90			30-150 %		и	<b>t</b> r	и	"	**	
2051-24-3	Decachlorobiphenyl (Sr)	109			30-150 %		н	"	**	*	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	98			30-150 %		n	н	40	*1	at	
General C	hemistry Parameters											
	% Solids	82.2		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	,1104943	1

Sample Id 100-Soil SB25896-	-51			nt Project # 5.1000.0000	)	<u>Matrix</u> Soil		ection Date -Mar-11 13			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenvis by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0227	1	SW846 8082A	21-Mar-11	25-Mar-11	SM	1104885	X
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0227	1	11			н	,,	X
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0227	1	n	n	*1	Ħ	R	X
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0227	1		н	47	**	**	Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0227	1	*	н	11	"	**	х
11097-69-1	Aroclor-1254	0.243		mg/kg dry	0.0227	1	"	н	•	"	•	х
11096-82-5	Arodor-1260	BRL		mg/kg dry	0.0227	1	•	н	11	11	•	х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0227	1	н	n	10	**	**	х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0227	1	п	41	(4	17	11	x
Surrogate i	ecoveries:		.,									
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	117			30-150 %		n	*	н	17	10	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	83			30-150 %		ri	ŧı	u	10	41	
2051-24-3	Decachlorobiphenyl (Sr)	108			30-150 %		"	**	n	**	10	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	93			30-150 %		•	ar	и	18	16	
General C	hemistry Parameters											
	% Solids	84.0		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104962	

Sample Id 101-sc SB25896-	5896-52		Client Project # 181125.1000.0000			<u>Matrix</u> Asphalt				Received 21-Mar-11		
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert
Semivolati	le Organic Compounds by GC							`.				
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.207	1	SW846 8082A	21-Mar-11	25-Mar-11	SM	1104885	X
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.207	1		10	44	u	ч	X
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.207	1	а	и	a	Ħ	#	X
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.207	1	•	н		•		Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.207	1	45	ч	19	н	n	Х
11097-69-1	Aroclor-1254	0.992		mg/kg dry	0.207	1	H	41	н	н	н	Х
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.207	1	п	17	n	"	н	Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.207	1	n	w	**	•	и	X
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.207	1	<b>.</b>	"	41	u	"	X
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	116			30-150 %		**	*1	4	**	1\$	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	90			30-150 %		10	Ħ	48	•	15	
2051-24-3	Decachlorobiphenyl (Sr)	106			30-150 %		te	**	14			
2051-24-3	Decachlorobiphenyl (Sr) [2C]	102			30-150 %		н	11	N	н	19	
General C	hemistry Parameters											
	% Solids	97.3		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104962	

102-sc	325896-53		Client Project # 181125.1000.0000				lection Date/Time 8-Mar-11 14:00		Received 21-Mar-11			
CAS No.	Analyte(s)	Result	Flag	Unîts	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0202	1	SW846 8082A	21-Mar-11	24-Mar-11	IMR	1104847	х
11104-28-2	Aroclar-1221	BRL		mg/kg dry	0.0202	1	. <del>ग</del>	tr	q		**	х
11141-16-5	Arocior-1232	BRL	•	mg/kg dry	0.0202	1	**	ŗ	4	11	**	х
53469-21-9	Arocior-1242	BRL		mg/kg dry	0.0202	1	н	ŧŧ	11		R	Х
12672-29 <del>-6</del>	Aroclor-1248	BRL		mg/kg dry	0.0202	1	R		**		. "	х
11097-69-1	Aroclor-1254	0.499		mg/kg dry	0.0202	1	16	и	•	н	n	х
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0202	1	t#	и	n	н		х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0202	1	n	п	•	•	19	х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0202	1		н	н	н	п	х
Surrogate i	recoveries;							*****				
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	73			30-150 %		10	19	II.	п		
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	83			30-150 %		**	п	•	•		
2051-24-3	Decachlorobiphenyl (Sr)	56			30-150 %		R	11	u	н	10	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	55			30-150 %		10	**	н	п	10	
General C	hemistry Parameters											
	% Solids	98.3		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104962	

Sample Io 103-sc SB25896-			Client Project # 181125.1000.0000			<u>Matrix</u> Asphalt	Matrix Collection Date/Time Asphalt 18-Mar-11 14:03			Received 21-Mar-11		
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0200	1	SW846 8082A	21-Mar-11	24-Mar-11	IMR	1104847	Х
11104-28-2	Aroclor-1221	BRL .		mg/kg dry	0.0200	1	41	н	10	п	10	Х
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0200	1	#	4	44	**	'n	Х
53469-21 <del>-9</del>	Aroclor-1242	BRL		mg/kg dry	0.0200	1	*1	•	10	4		Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0200	1	u	Ħ		*		х
11097-69-1	Aroclor-1254	0.171		mg/kg dry	0.0200	1	**	п		D	10	х
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0200	1	**	M	н		•	х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0200	1	•	**	м		14	х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0200	1	Rt.	н	н	н	н	Х
Surrogate i	recoveries:					· ···	·					
10385-84-2	4,4-DB-Octafluorobiphenyl (Sr)	67			30-150 %		97	н	н	11	10	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	72			30-150 %		**	*	N	**	**	
2051-24-3	Decachlorobiphenyl (Sr)	55			30-150 %		н	н	n	ıţ	lr .	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	46			30-150 %		н	N	14	47	•	
General C	hemistry Parameters											
	% Solids	99,3		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104962	

nalyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD .	RPD Limi
atch 1104847 - SW846 3549C										
Blank (1104847-BLK1)					Pre	pared: 21-	Mar-11 An	alyzed: 22-M	ar-11	
Arodor-1016	BRL		mg/kg wet	0.0200						
Arodor-1016 [2C]	BRL		mg/kg wet	0.0200						
Aroclor-1221	BRL		mg/kg wet	0.0200						
Arodor-1221 [2C]	BRL		mg/kg wet	0.0200						
Aroclor-1232	BRL		mg/kg wet	0.0200						
Aroclor-1232 [2C]	BRL		mg/kg wet	0.0200						
Arodor-1242	BRL		mg/kg wet	0.0200						
Arodor-1242 [2C]	BRL		mg/kg wet	0.0200						•
Arodor-1248	BRL		mg/kg wet	0.0200						
Arodor-1248 [2C]	BRL		mg/kg wet	0.0200						
Aroclor-1254	BRL		mg/kg wet	0.0200						
Arodor-1254 [2C]	BRL		mg/kg wet	0.0200						
Aroclor-1260	BRL		mg/kg wet	0.0200				12		
Aroclor-1260 [2C]	BRL		mg/kg wet	0.0200						
Aroclor-1262	BRL		mg/kg wet	0.0200	4					
Arodor-1262 [2C]	BRL		mg/kg wet	0.0200						
Aroclor-1268	BRL		mg/kg wet	0.0200						
Aroclor-1268 [2C]	BRL		mg/kg wet	0,0200						
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	0.0177		mg/kg wet		0.0200		88	30-150		·
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.0215		mg/kg wet		0.0200		108 *	30-150		
Surrogate: Decachlorobiphenyl (Sr)	0.0241		mg/kg wet		0.0200		121	30-150		
Surrogate: Decachiorobiphenyl (Sr) [2C]	0.0246		mg/kg wet		0.0200		123	30-150		
LCS (1104847-BS1)	*******		g///g tree			nnamel 01		alvzed: 23-N		
Arodor-1016	0.204		malka wat	0.0200	0.250	spated: Z1-			1ar-11	
Araclor-1016 [2C]	0.232		mg/kg wet				82	50-140		
Aroclor-1260	0.213		mg/kg wet	0.0200	0,250		93	50-140		
Aroclor-1260 [2C]	0.218		mg/kg wet mg/kg wet	0.0200 0.0200	0.250 0.250		85 87	50-140		
				0.0200			~~~~	50-140		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	0.0174		mg/kg wet		0.0200		87	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.0201		mg/kg wet		0.0200		101	30-150		
Surrogate: Decachlorobiphenyl (Sr)	0.0236		mg/kg wet		0.0200		118	30-150		
Surrogate: Decachiorobiphenyl (Sr) [2C]	0.0276		mg/kg wet		0.0200		138	30-150		
LCS Dup (1104847-B\$D1)					<u>Pn</u>	epared: 21-	Mar-11 An	alyzed: 23-N	<u>lar-11</u>	
Aroclor-1016	0.224		mg/kg wet	0.0200	0.250	,	89	50-140	9	30
Aroclor-1016 [2C]	0.243		mg/kg wet	0.0200	0.250		97	50-140	5	30
Aroclor-1260	0.228		mg/kg wet	0.0200	0.250		91	50-140	7	30
Aroclor-1260 [2C]	0.205		mg/kg wet	0.0200	0.250		82	50-140	6	30
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	0.0189		mg/kg wet		0.0200		94	<b>30</b> -150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.0203		mg/kg wet		0.0200		102	30-150		
Surrogate: Decachlorobiphenyl (Sr)	0.0259		mg/kg wet		0.0200		130	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	0.0258		mg/kg wet		0.0200		129	30-150		
atch 1104882 - SW846 3540C										
Blank (1104882-BLK1)					Pre	epared: 21	-Mar-11 An	alyzed: 23-N	iar-11_	
Arodor-1016	BRL		mg/kg wet	0.0200						
Aroclor-1016 [2C]	BRL		mg/kg wet	0.0200						
Aroclor-1221	BRL		mg/kg wet	0.0200						
Arodor-1221 [2C]	BRL		mg/kg wet	0.0200						
Arodor-1232	BRL		mg/kg wet	0.0200						
Aroclor-1232 [2C]	BRL		mg/kg wet	0.0200						
Aroclor-1242	BRL		mg/kg wet	0.0200						
Aroclor-1242 [2C]	BRL		mg/kg wet	0.0200						

nalyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
atch 1104882 - SW846 3540C										
Blank (1104882-BLK1)					<u>Pre</u>	epared: 21-	Mar-11 An	alvzed: 23-N	lar-11	
Aroclor-1248	BRL		mg/kg wet	0.0200						
Aroclor-1248 [2C]	BRL		mg/kg wet	0.0200						
Aroclor-1254	BRL		mg/kg wet	0.0200						
Aroclor-1254 [2C]	BRL		mg/kg wet	0.0200						
Aroclor-1260	BRL		mg/kg wet	0.0200						
Aroclor-1260 [2C]	BRL		mg/kg wet	0.0200						
Aroclor-1262	BRL		mg/kg wet	0.0200						
Aroclor-1262 [2C]	BRL		mg/kg wet	0.0200	•					
Aroclor-1268	BRL		mg/kg wet	0.0200						
Aroclor-1268 [2C]	BRL		mg/kg wet	0.0200						
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	0.0194		mg/kg wet		0.0200		97	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.0218		mg/kg wet		0.0200		109	30-150		
Surrogate: Decachlorobiphenyl (Sr)	0.0255		mg/kg wet		0.0200		128	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	0.0211		mg/kg wet		0.0200		106	30-150		
LCS (1104882-BS1)					Pn	epared: 21-	Mar-11 An	alyzed: 23-N	Aar-11	
Aroclor-1016	0.217		mg/kg wet	0.0200	0,250	**************************************	87	50-140		
Aroclor-1016 [2C]	0.228		mg/kg wet	0.0200	0.250		91	50-140		
Aroclor-1260	0,221		mg/kg wet	0.0200	0.250		89	50-140		
Aroclor-1260 [2C]	0.210		mg/kg wet	0.0200	0.250		84	50-140		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	0.0218		mg/kg wet		0.0200		109	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.0228		mg/kg wet		0.0200		114	30-150 30-150		
Surrogate: Decachlorobiphenyl (Sr)	0.0248		mg/kg wet		0.0200		124	30-150 30-150		
Surrogate: Decachiorobiphenyl (Sr) [2C]	0.0236		mg/kg wet		0.0200		118	30-150		
LCS Dup (1104882-BSD1)			g.ittg if ot			nonmati 24		alyzed: 23-N	fan 11	
Aroclor-1016	0,234		mg/kg wet	0.0200	0.250	cpared. 21-	94	50-140		20
Aroclor-1016 [2C]	0.231		mg/kg wet	0.0200	0.250		93	50-140	8	30
Aroclor-1260	0.216		mg/kg wet	0.0200	0.250		86	50-140	1 3	30 30
Aroclor-1260 [2C]	0.224		mg/kg wet	0.0200	0.250		90	50-140 50-140	6	30
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	0.0226		mg/kg wet		0.0200		113	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.0233		mg/kg wet		0.0200		117	30-150		
Surrogate: Decachlorobiphenyl (Sr)	0.0259		mg/kg wet		0.0200		130	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	0.0240		mg/kg wet		0.0200		120	30-150		
atch 1104883 - SW846 3540C							.25	55 156		
Blank (1104883-BLK1)					De		14	-td. 64 t		
Aroclor-1016	BRL		malka wat	0.0200	Pit	epareu, z I-	mai-11 An	alyzed: 24-N	nar-11	
Aroclor-1016 [2C]	BRL		mg/kg wet	0.0200						
Aroclor-1221	BRL		mg/kg wet							
Aroclor-1221 [2C]	BRL		mg/kg wet	0.0200						
Aroclor-1232	BRL		mg/kg wet mg/kg wet	0.0200 0.0200						
Aroclor-1232 [2C]	BRL		mg/kg wet	0.0200						
Aroclor-1242	BRL			0.0200						
Aroclor-1242 [2C]	BRL		mg/kg wet	0.0200						
Aroclor-1248	BRL		mg/kg wet							
Aroclor-1248 [2C]	BRL		mg/kg wet	0.0200						
Aroctor-1254	BRL		mg/kg wet	0.0200						
Aroclor-1254 [2C]	BRL		mg/kg wet	0.0200						
, 40401-1207 [20]	BRL		mg/kg wet	0.0200						
Amelor-1260	RH.		mg/kg wet	0.0200						
Aroclor-1260										
Aroclor-1260 Aroclor-1260 [2C] Aroclor-1262	BRL BRL		mg/kg wet mg/kg wet	0.0200 0.0200						

nalyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limi
tch 1104883 - SW846 3540C										
Blank (1104883-BLK1)					Pre	epared: 21-	Mar-11 An	alyzed: 24-M	ar-11	
Aroclor-1268	BRL		mg/kg wet	0.0200						
Aroclor-1268 [2C]	BRL		mg/kg wet	0.0200						
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	0.0264		mg/kg wet		0.0200		132	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.0199		mg/kg wet		0.0200		100	30-150		
Surrogate: Decachlorobiphenyl (Sr)	0.0228		mg/kg wet		0.0200		114	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	0.0187		mg/kg wet		0.0200		94	30-150	*,	
LCS (1104883-BS1)					Pro	pared: 21-	Mar-11 Ar	nalyzed: 24-M	lar-11	
Aroclor-1016	0.227		mg/kg wet	0.0200	0.250		91	50-140		
Aroclor-1016 [2C]	0.225		mg/kg wet	0.0200	0.250		90	50-140		
Aroclor-1260	0.201		mg/kg wet	0.0200	0.250		80	50-140		
Aroclor-1260 [2C]	0.237		mg/kg wet	0.0200	0,250		95	50-140		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	0.0208		mg/kg wet		0.0200		104	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.0196		mg/kg wet		0.0200		98	30-150		
Surrogate: Decachlorobiphenyi (Sr)	0.0201		mg/kg wet		0.0200		101	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	0.0175		mg/kg wet		0.0200		88	30-150		
LCS Dup (1104883-BSD1)	0.07.70		mgmg not			anarad: 21		nalyzed: 24-M	lar 11	
Aroclor-1016	0.190		mg/kg wet	0.0200	0.250	spared. ZI-	76	50-140	18	30
Aroclor-1016 [2C]	0.130		mg/kg wet	0.0200	0.250		87	50-140	4	30 30
Aroclor-1260	0.191		mg/kg wet	0.0200	0.250		76	50-140	5	30
Aroclor-1260 [2C]	0.221		mg/kg wet	0.0200	0.250		88	50-140	7	30
				0.0200						
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.0174 0.0195		mg/kg wet		0.0200		87	30-150		
Surrogate: Decachiorobiphenyl (Sr)	0.0195		mg/kg wet		0.0200		98	30-150		
Surrogate: Decachiorobiphenyl (Sr) [2C]	0.0164		mg/kg wet mg/kg wet		0.0200 0.0200		83	30-150		
	0.0704			05000 40			82	30-150		
<u>Duplicate (1104883-DUP1)</u> Aroclor-1016	DDI		Source: SB		Ph		-Mar-11 Ar	nalyzed: 24-M	<u>lar-11</u>	
Arodor-1016 [2C]	BRL BRL		mg/kg dry	0.0245		BRL				40
Arodor-1816 (20) Arodor-1221			mg/kg dry	0.0245		BRL				40
Arodor-1221 [2C]	BRL		mg/kg dry	0.0245		BRL				40
Arodor-1232 Arodor-1232	BRL		mg/kg dry	0.0245		BRL				40
	BRL		mg/kg dry	0.0245		BRL				40
Aroclor-1232 [2C] Aroclor-1242	BRL		mg/kg dry	0.0245		BRL				40
	BRL BRL		mg/kg dry	0.0245		BRL				40
Aroclor 1248			mg/kg dry	0.0245		BRL			•	40
Aroclor-1248 Aroclor-1248 [2C]	BRL		mg/kg dry	0.0245		BRL				40
Arocior-1246 [20] Arocior-1254	BRL		mg/kg dry	0.0245		BRL			0-	40
Arocior-1254 Arocior-1254 [2C]	2.66		mg/kg dry	0.0245		2.14			22	40
Arodor-1260	2.68		mg/kg dry	0.0245		2.22			18	40
Arodor-1260 [2C]	BRL		mg/kg dry	0.0245		BRL				40
Arodor-1260 [20] Arodor-1262	BRL		mg/kg dry	0.0245		BRL				40
	BRL		mg/kg dry	0.0245		BRL				40
Aroclor-1262 [2C] Aroclor-1268	BRL		mg/kg dry	0.0245		BRL				40
Aroclor-1268 Aroclor-1268 [2C]	BRL		mg/kg dry	0.0245		BRL				40
	BRL		mg/kg dry	0.0245		BRL				40
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	0.0350		mg/kg dry		0.0245		143	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.0244		mg/kg dry		0.0245		99	30-150		
Surrogate: Decachlorobiphenyl (Sr)	0.0290		mg/kg dry		0.0245		118	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	0.0268		mg/kg dry		0.0245		109	30-150		
Matrix Spike (1104883-MS1)			Source: SB					nalyzed: 24-N	<u>lar-11</u>	
Aroclor-1016	0.242		mg/kg dry	0.0237	0.296	BRL	82	40-135		
Aroclor-1016 [2C]	0.247		mg/kg dry	0.0237	0,296	BRL	83	40-135		

nalyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limi
atch 1104883 - SW846 3540C										
Matrix Spike (1104883-MS1)			Source: SB	<u> 25896-13</u>	<u>Pre</u>	epared: 21-	Mar-11 Ar	nalyzed: 24-M	lar-11	
Arodor-1260	0.534	QM2	mg/kg dry	0.0237	0.296	BRL	180	40-135		
Arodor-1260 [2C]	0.546	QM2	mg/kg dry	0.0237	0.296	BRL	184	40-135		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	0.0249		mg/kg dry		0.0237		105	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.0218		mg/kg dry		0.0237		92	30-150		
Surrogate: Decachlorobiphenyl (Sr)	0.0292		mg/kg dry		0.0237		123	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	0.0285		mg/kg dry		0.0237		120	30-150		
Matrix Spike Dup (1104883-MSD1)			Source: SB	25896-13	<u>Pre</u>	epared: 21-	Mar-11 A	nalyzed: 24-M	lar-11	
Aroclor-1016	0.277		mg/kg dry	0.0242	0,302	BRL	92	40-135	11	30
Aroclor-1016 [2C]	0.286		mg/kg dry	0.0242	0.302	BRL	95	40-135	13	30
Aroclor-1260	0.616	QM2	mg/kg dry	0.0242	0.302	BRL	204	40-135	13	30
Aroclor-1260 [2C]	0.694	QM2	mg/kg dry	0.0242	0.302	BRL	230	40-135	22	30
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	0.0296		mg/kg dry		0.0242		123	30-150		******
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.0254		mg/kg dry		0.0242		105	30-150		
Surrogate: Decachlorobiphenyl (Sr)	0.027 <b>3</b>		mg/kg dry		0.0242		113	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	0.0220		mg/kg dry		0.0242		91	30-150		
atch 1104885 - SW846 3540C			-							
Blank (1104885-BLK1)					Pre	enared: 21-	Mar-11 A	nalyzed; 24-N	lar-11	
Aroclor-1016	BRL		mg/kg wet	0.0200	-13		77.0	ildişedd, 24 ji	IMI-TT.	
Arodor-1016 [2C]	BRL		mg/kg wet	0.0200						
Aroclor-1221	BRL		mg/kg wet	0.0200						
Aroclor-1221 [2C]	BRL		mg/kg wet	0.0200						
Arador-1232	BRL		mg/kg wet	0.0200						
Aroclor-1232 [2C]	BRL		mg/kg wet	0.0200						,
Aroclor-1242	BRL		mg/kg wet	0.0200						
Aroclor-1242 [2C]	BRL		mg/kg wet	0.0200			•			
Aroclor-1248	BRL		mg/kg wet	0.0200						
Aroclor-1248 [2C]	BRL		mg/kg wet	0.0200						
Aroclor-1254	BRL		mg/kg wet	0.0200						
Aroclor-1254 [2C]	BRL		mg/kg wet	0.0200						
Aroclor-1260	BRL		mg/kg wet	0.0200						
Aroclor-1260 [2C]	BRL		mg/kg wet	0.0200						
Aroclor-1262	BRL		mg/kg wet	0.0200						
Arodor-1262 [2C]	BRL		mg/kg wet	0.0200						
Aroclor-1268	BRL		mg/kg wet	0.0200						
Arodor-1268 [2C]	BRL		mg/kg wet	0.0200						
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	0,0226		mg/kg wet		0.0200		113	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.0184		mg/kg wet		0.0200		92	30-150		
Surrogate: Decachlorobiphenyl (Sr)	0.0203		mg/kg wet		0.0200		102	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	0.0178		mg/kg wet		0.0200		89	30-150		
LCS (1104885-BS1)			- <del>-</del>			epared: 21-		nalyzed: 24-N	lar-11	
Aroclor-1016	0.225		mg/kg wet	0.0200	0.250	<u> </u>	90	50-140	·	
Aroclor-1016 [2C]	0.206		mg/kg wet	0.0200	0.250		82	50-140		
Aroclor-1260	0.210		mg/kg wet	0.0200	0.250		84	50-140		•
Aroclor-1260 [2C]	0.228		mg/kg wet	0.0200	0.250		91	50-140		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	0.0203									
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.0203		mg/kg wet		0.0200		102 86	30-150 30-150		
Surrogate: 0-2016/10/06/06/06/06/06/06/06/06/06/06/06/06/06	0.0173		mg/kg wet		0.0200		86 105	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	0.025		mg/kg wet mg/kg wet		0.0200 0.0200		105 77	30-150 20-150		
LCS Dup (1104885-BSD1)	V.0107		myrky wet					30-150	1 4 *	
					Pre	-pared: 21-	mar-11 Aı	nalyzed: 24-N	ıar-11	

nalyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPE Limi
itch 1104885 - SW846 3540C								.,,		
LCS Dup (1104885-BSD1)					Pre	pared: 21-	Mar-11 An	alyzed: 24-N	Mar-11	
Aroclor-1016 [2C]	0.211		mg/kg wet	0.0200	0.250		84	50-140	2	30
Aroclor-1260	0.217		mg/kg wet	0.0200	0.250		87	50-140	4	30
Aroclor-1260 [2C]	0.227		mg/kg wet	0.0200	0.250		91	50-140	0.4	30
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	0.0205		mg/kg wet		0.0200		103	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.0174		mg/kg wet		0.0200		87	30-150		
Surrogate: Decachlorobiphenyl (Sr)	0.0218	•	mg/kg wet		0.0200		109	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	0.0165		mg/kg wet		0.0200		82	30-150		
Duplicate (1104885-DUP1)			Source: SB	<u> 25896-33</u>	Pre	pared: 21-	Mar-11 An	alyzed: 24-N	<u> 1ar-11</u>	
Aroclor-1016	BRL		mg/kg dry	0.0536		BRL				40
Arodor-1016 [2C]	BRL		mg/kg dry	0.0536		BRL				40
Aroclor-1221	BRL		mg/kg dry	0.0536		BRL				40
Aroclor-1221 [2C]	BRL		mg/kg dry	0.0536		BRL				40
Aroclor-1232	BRL		mg/kg dry	0.0536		BRL				40
Arodor-1232 [2C]	BRL		mg/kg dry	0.0536		BRL				40
Aroclor-1242	BRL		mg/kg dry	0.0536		BRL				40
Arodor-1242 [2C]	BRL		mg/kg dry	0.0536		BRL				40
Aroclor-1248	BRL		mg/kg dry	0.0536		BRL				40
Aroclor-1248 [2C]	BRL		mg/kg dry	0.0536		BRL				40
Aroclor-1254	BRL		mg/kg dry	0.0536		0.0422				40
Aroclor-1254 [2C]	0.0263	j	mg/kg dry	0.0536		0.0367			33	40
Aroclor-1260	BRL		mg/kg dry	0.0536		BRL				40
Arador-1260 [2C]	BRL		mg/kg dry	0.0536		BRL				40
Aroclor-1262	BRL		mg/kg dry	0.0536		BRL				40
Aroclor-1262 [2C]	BRL		mg/kg dry	0.0536		BRL				40
Arocior-1268	BRL		mg/kg dry	0.0536		BRL				40
Aroclor-1268 [2C]	BRL		mg/kg dry	0.0536		BRL				40
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	0.0896	502	mg/kg dry		0.0536		167	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.0687		mg/kg dry		0.0536		128	30-150		
Surrogate: Decachlorobiphenyl (Sr)	0.0802		mg/kg dry		0.0536		150	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	0.0743		mg/kg dry		0.0536		139	30-150		
Matrix Spike (1104885-MS1)			Source: SB:	<u> 25896-33</u>	<u>Pre</u>	pared: 21-	Mar-11 An	alyzed: 24-N	1ar-11	
Aroclor-1016	0.635		mg/kg dry	0.0624	0.780	BRL	81	40-135		
Aroclor-1016 [2C]	0.625		mg/kg dry	0.0624	0.780	BŖL	80	40-135		
Aroclor-1260	0.668		mg/kg dry	0.0624	0.780	BRL	86	40-135		
Aroclor-1260 [2C]	0.725		mg/kg dry	0.0624	0.780	BRL	93	40-135		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	0.0530		mg/kg dry		0.0624		85	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.0536		mg/kg dry		0.0624		86	30-150		
Surrogate: Decachlorobiphenyl (Sr)	0.0655		mg/kg dry		0.0624		105	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	0.0568		mg/kg dry	•	0.0624		91	30-150		
Matrix Spike Dup (1104885-MSD1)			Source: SB:	25896 <u>-33</u>	<u>Pre</u>	pared: 21-	Mar-11 An	alyzed: 24-N	lar-11	
Aroclor-1016	0.545		mg/kg dry	0.0578	0.722	BRL	76	40-135	8	30
Aroclor-1016 [2C]	0.533		mg/kg dry	0.0578	0.722	BRL	74	40-135	8	30
Aroclor-1260	0,580		mg/kg dry	0.0578	0.722	BRL	80	40-135	6	30
Aroclor-1260 [2C]	0.654		mg/kg dry	0.0578	0.722	BRL	91	40-135	3	30
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	0.0569		mg/kg dry		0.0578		98	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.0500		mg/kg dry		0.0578		87	30-150		
Surrogate: Decachiorobiphenyl (Sr)	0.0621		mg/kg dry		0,0578		108	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	0.0601		mg/kg dry		0.0578		104	30-150		

#### General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1104942 - General Preparation										
<u> Duplicate (1104942-DUP1)</u>			Source: SE	325896-11	Po	epared & A	nalyzed: 22	-Mar-11		
% Solids	70.9		%		_	69.0			3	20
Batch 1104943 - General Preparation		•								
Duplicate (1104943-DUP1)			Source: SE	325896-31	Pr	epared & A	nalvzed: 22	-Mar-11		
% Solids	97.9		%		. –	97.5			0.4	20
Batch 1104962 - General Preparation										
<u>Duplicate (1104962-DUP1)</u>			Source: SE	325896-51	Pr	epared & A	nalyzed: 22	-Mar-11		
% Solids	83,5		%			84.0		1	0.5	20

#### **Notes and Definitions**

QM2	The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration
	of analyte inherent in the sample.

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

BRL Below Reporting Limit - Analyte NOT DETECTED at or above the reporting limit

dry Sample results reported on a dry weight basis

NR Not Reported

RPD Relative Percent Difference

J Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).

A plus sign (+) in the Method Reference column indicates the method is not accredited by NELAC.

<u>Laboratory Control Sample (LCS)</u>: A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

<u>Matrix Spike</u>: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

<u>Surrogate</u>: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Continuing Calibration Verification: The calibration relationship established during the initial calibration must be verified at periodic intervals. Concentrations, intervals, and criteria are method specific.

Validated by: June O'Connor Rebecca Merz

# Reasonable Confidence Protocols Laboratory Analysis QA/QC Certification Form

Laboratory Name: Spectrum Analytical, Inc.

Client: TRC - Windsor, CT

Project Location: Quirk Middle School - Hartford, CT

Project Number: 181125.1000.0000

Sampling Date(s):

Laboratory Sample ID(s):

3/18/2011

SB25896-01 through SB25896-54

RCP Methods Used: SW846 8082A

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence Protocol documents?	1	Yes	·	No
1A	Were the method specified preservation and holding time requirements met?	1	Yes		No
1B	VPH and EPH methods only: Was the VPH or EPH method conducted without significant modifications (see Section 11.3 of respective RCP methods)?		Yes		No
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	. 1	Yes		No
3	Were samples received at an appropriate temperature?	7	Yes		No
4	Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents . achieved?		Yes	1	No
5	a) Were reporting limits specified or referenced on the chain-of-custody? * b) Were these reporting limits met? *Exceptions are defined by qualifiers		Yes Yes	1	No No
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	1	Yes	<u>_</u>	No
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	1	Yes	<del></del>	No

Note: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet the requirements for "Reasonable Confidence."

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for obtaining the information contained in this analytical report, such information is accurate and complete.

Nicole Leja Laboratory Director

Micole Leja

Date: 3/25/2011

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# APPENDIX B Public Communication Procedure

#### Insert Date Here

#### Draft Notification to Parents, Teachers and Employee Organizations

International Baccalaureate School (formerly Thomas J. Quirk Middle School) East Building and Connectors will commence a demolition and renovation program starting on *[insert date]*. During this program there will be removal of asbestos containing materials, and PCB-contaminated building materials at the school.

The asbestos and PCB abatement programs were authorized by the State of Connecticut Departments of Public Health (CT DPH) and Environmental Protection (CT DEP), the United States Environmental Protection Agency Region 1 (EPA) and Connecticut Schools Facility Unit after careful planning and thorough review.

Workers and students will not use the International Baccalaureate School while removal and abatement is ongoing. The School will reopen after the asbestos and PCB abatement work along with the planned renovations are completed.

The asbestos and PCB abatement work will be performed by a Connecticut Department of Public Health licensed asbestos abatement contractor and personnel experienced in the handling of PCB contaminated materials, *insert contractor name here*. Asbestos and PCB abatement work will be monitored continuously by *insert contractor name here*, an independent environmental consultant hired by the State to conduct inspection and testing during asbestos and PCB abatement activities.

As required by the CT DPH, CT DEP and EPA, this notification is being sent to parents, teachers, and employee organizations at the International Baccalaureate School. Any questions about the project may be directed to, *insert contact name here*.

We appreciate your patience and understanding during this process.

Sincerely,

insert contact name here.

(please turn over  $\rightarrow$ )

State of Connecticut

Department of Public Health

Division of Environmental Health 410 Capitol Avenue, MS#51AIR

Hartford, CT 06134-0308

860-509-7367

State of Connecticut

Department of Environmental Protection

79 Elm Street

Hartford, CT 06106

860-424-3329

Asbestos/PCB Consultant:

To be determined Street Address City, State Zip Code Contact Number

Asbestos/PCB Abatement Contractor:

To be determined Street Address City, State Zip Code Contact Number

cc:

insert contact name here, Mayor, City of Hartford

insert contact name here, General Manager, City of Hartford

insert contact name here, Superintendent of Schools

insert contact name here, Principal, International Baccalaureate School

# APPENDIX C EPA Region 1 SOP

Rev. #: Date:

0.0 12/01/97

Page:

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# REGION I, EPA-NEW ENGLAND

## **DRAFT** STANDARD OPERATING PROCEDURE FOR SAMPLING CONCRETE IN THE FIELD



### U.S. EPA-NEW ENGLAND Region I Quality Assurance Unit Staff Office of Environmental Measurement and Evaluation

Prepared by:

Man W Peterson

**Quality Assurance Chemist** 

Date: 12/30/97

Andrew Beliveau

Date: 12/30/97

Reviewed by:

Senior Technical Specialist

Nancy Barmakian

Date: 12/30/97

Approved by:

**Branch Chief** 

Rev, #: Date:

0.0 12/01/97

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## Region I, EPA New England

# Standard Operating Procedure for Sampling Concrete in the Field

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#### Region I, EPA New England

Standard Operating Procedure for Sampling Concrete in the Field

#### 1.0 Scope and Application

The following Standard Operating Procedure (SOP) describes a concrete sampling technique which uses an impact hammer drill to generate a uniform, finely ground, powder which is easily homogenized, extracted and analyzed. This procedure is primarily geared at providing enough sample for one or two different analyses at a time. That is, the time required to generate sufficient sample for a full sweet of analyses may be impractical. The concrete powder is suitable for all types of environmental analyses, with the exception of volatile compounds, and may be analyzed in the field or at a fixed laboratory. This procedure is applicable for the collection of samples from concrete floors, walls, and ceilings.

The impact hammer drill is far less labor intensive than previous techniques using coring devices, or hammers and chisels. It allows for easy selection of sample location and sample depth. Not only can the project planner control the depth to sample into the concrete, from surface samples (0 - ½ inch) down to a core of the entire slab, but the technique can also be modified to collect samples at discrete depths within the concrete slab.

Another issue with concrete sampling is the fact that the amount of time spent drilling translates into the weight of sample produced. Thus, to maximize sampling time, it is important to know the minimum amount of sample required for each analysis. To do this, the project planner should take the following steps: 1) Use the Data Quality Objective (DQO) process and familiarity with the site to develop the objectives of the sampling project and the depth(s) of sample to be collected. 2) Review the site history and any previous data collected to determined possible contaminants of concern. 3) Establish the action levels for those possible contaminants and determine the appropriate analytical methods (both field and/or fixed laboratory) to meet the DQOs of the project. 4) Based on the detection limits of these methods, determine the amount of sample required for each analysis and the total sample weight require for each sample location (including quality control samples).

As with any environmental data collection project, all aspects of a concrete sampling episode should be well thought out, prior to going out in the field, and thoroughly described in a Quality Assurance Project Plan (QAPP). The QAPP should clearly state the DQOs of the project and document a complete Quality Assurance/Quality Control program to reconcile the data generated with the established DQOs. For more information on these subjects, refer to EPA documents QA/R-5, EPA Requirements for Quality Assurance Project Plans for Environmental Data Operations, and QA/G-4, Guidance for the Data Quality Objective Process.

#### 2.0 Method Summary

A one-inch diameter carbide drill bit is used in a rotary impact hammer drill to generate a fine concrete powder suitable for analysis. The powder is placed in a sample container and homogenized for field or fixed laboratory analysis. The procedure can be used to sample a single depth into the concrete, or may be modified to sample the concrete at distinctly different depth zones. The modified depth sampling procedure is designed to minimize any cross contamination between the sampling zones. If different

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sampling depths are required, two different diameter drill bits and a vacuum sampling apparatus are employed.

#### 3.0 Health and Safety

Eye and hearing protection are required at all times during sample drilling. A small amount of dust is generated during the drilling process. Proper respiratory protection and/or a dust control system must be in place at all times during sampling.

#### 4.0 Interferences and Potential Problems

Since this sampling technique produces a finely ground uniform powder, physical matrix effects from variations in the sample consistency (i.e., particle size, uniformity, homogeneity, and surface condition) are minimized. Matrix spike analysis of a sample is highly recommended to monitor for any matrix related interferences.

As stated in Section 1.0 above, this sampling procedure is not recommended for volatile organic compound (VOC) analysis. The combination of heat generated during drilling and the exposure of a large amount of surface area will greatly reduce VOC recovery. If low boiling point semi-volatile compounds (i.e., naphthalene) are being analyzed, then the drill speed should be reduced to minimize heat build-up.

#### 5.0 Equipment and Supplies

#### 5.1 Single Depth Concrete Sampling

5.1.1	Rotary impact hammer drill
	reduct in pact manning of the

- 5.1.2 1-inch diameter carbide drill bits
- 5.1.3 Stainless steel scoopulas
- 5.1.4 Stainless steel spoonulas (for collecting sample in deeper holes, >2-inches)
- 5.1.5 Rectangular aluminum pans (to catch concrete during wall and ceiling sampling)
- 5.1.6 Gasoline powered generator (if alternative power source is required)

#### 5.2 Multiple Depth Sampling (in addition to all the above)

- 5.2.1 ½ inch diameter carbide drill bits
- 5.2.2 Vacuum/sample trap assembly (see Section 7.2 and Figure 1)
- 5.2.2.1 Vacuum pump
- 5.2.2.2 2-hole rubber stopper
- 5.2.2.3 Glass tubing (to fit stopper)
- 5.2.2.4 Large glass test tubes, or Erlenmeyer flasks, for sample trap (several are suggested)
- 5.2.2.5 Polyethylene tubing for trap inlet (Tygon tubing may be used for the trap outlet)
- 5.2.2.6 Pasture pipets
- 5.2.2.7 Pipe cleaners
- 5.2.2.8 In-line dust filter (glass fiber filter, or equivalent)

Sample Id 49-SC SB25773-	dentification		***************************************	t Project # 5.1000.000	0	<u>Matrix</u> Concrete	-	ection Date -Mar-11 00			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert
Semivolati	lle Organic Compounds by GC	`										
	nated Bipherryls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		µg/kg dry	62.5	1	SW846 8082A	18-Mar-11	24-Mar-11	TG	1104724	X
11104-28-2	Aroclor-1221	BRL		µg/kg dry	62.5	1	M	ŧŧ	•1	u		X
11141-18-5	Aroclor-1232	BRL		µg/kg dry	62.5	1	N	**	•	•	. 11	X
53469-21-9	Aroclor-1242	BRL		μg/kg dry	62.5	1	•	**	••	u	**	X
12672-29-6	Aroclor-1248	BRL		µg/kg dry	62.5	1	Ħ	78	н		**	х
11097-69-1	Aroclor-1254	BRL		µg/kg dry	62.5	1	м	11	41	w	10	Х
11096-82-5	Aroclor-1260	BRL		µg/kg dry	62.5	1	н	le .	ď	11	u	х
37324-23-5	Aroclor-1262	BRL		µg/kg đry	62.5	1	**	11	п		"	х
11100-14-4	Aroclor-1268	BRL		µg/kg đry	62,5	1	и	16	u	#1	**	х.
Surrogate r	ecoveries:		•									
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	93	•		30-150 %		'n	11	*1	**	**	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	112			30-150 %		н	11	п	**	•	
2051-24-3	Decachlorobiphenyl (Sr)	68			30-150 %			"	41	"	**	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	73			30-150 %		o	16	**	11	•	
General Cl	hemistry Parameters											
	% Solids	96.1		%		1	SM2540 G Mod.	17-Mar-11	17-Mar-11	BD	1104690	

Sample Identification 50-SC SB25773-50			Client Project # 181125.1000.0000			<u>Matrix</u> Concret		Received 17-Mar-11				
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	65.6	1	SW846 8082A	18-Mar-11	21-Mar-11	SM	1104796	х
11104-28-2	Aroclor-1221	BRL		μg/kg dry	65.6	1	11	n	и	•		х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	65.6	1	w	**			44	х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	65,6	1	er e	•	10	н	н	х
12672-29-6	Aroclor-1248	BRL		µg/kg dry	65.6	1	**	*1	10	**	10	х
11097-69-1	Aroclor-1254	BRL		μg/kg đry	65.6	1	**	**	**	10	11	х
11098-82-5	Aroclor-1260	BRL		µg/kg dry	65.6	1	H	н	44	q		х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	65.6	1	н		44	•		Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	65.6	1	н	н	n	91	nč	Х
Surrogate r	ecoveries:	-1-0/-0	7									
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	124			30-150 %			19	u	•		
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	92			30-150 %		14	11	н	н	"	
2051-24-3	Decachlorobiphenyl (Sr)	100			30-150 %		ч	19	н	н	n	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	113			30-150 %		**	**	и		•	
General Cl	hemistry Parameters											
	% Solids	97.6		%		1	SM2540 G Mod.	17- <b>M</b> ar-11	17-Mar-11	₿D	1104690	

nalyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
atch 1104683 - SW846 3540C										
Biank (1104683-BLK1)					Pre	epared: 17-	Mar-11 An	alyzed: 24-M	lar-11	
Aroclor-1016	BRL		μg/kg wet	20.0						
Arador-1016 [2C]	BRL		µg/kg wet	20,0						
Arodor-1221	BRL		µg/kg wet	20.0						
Arodor-1221 [2C]	BRL		µg/kg wet	20.0						
Arodor-1232	BRL		µg/kg wet	20.0						
Aroclor-1232 [2C]	BRL		μg/kg wet	20.0						
Aroclor-1242	BRL		μg/kg wet	20.0						
Aroclor-1242 [2C]	BRL		µg/kg wet	20.0			•			
Aroclor-1248	BRL		µg/kg wet	20.0						
Aroclor-1248 [2C]	BRL		µg/kg wet	20,0						
Aroclor-1254	BRL		µg/kg wet	20.0		•				
Aroclor-1254 [2C]	BRL		μg/kg wet	20.0						
Aroclor-1260	BRL		μg/kg wet	20.0						
Arodor-1260 [2C]	BRL		µg/kg wet	20.0						
Aroclor-1262	BRL		μg/kg wet	20.0						
Arodor-1262 [2C]	BRL		μg/kg wet	20.0						
Aroclor-1268	BRL		μg/kg wet	20.0			•			
Aroclor-1268 [2C]	BRL		μg/kg wet	20.0						
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	20.8		μg/kg wet		20.0		104	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	24.1		µg/kg wet		20.0		121	30-150		
Surrogate: Decachlorobiphenyl (Sr)	15.4		μg/kg wet		20.0		77	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	13.5		μg/kg wet		20.0		68	30-150		
LCS (1104683-BS1)					<u>Pro</u>	epared: 17-	Mar-11 An	alyzed: 24-N	<u>lar-11</u>	
Aroclor-1016	211		µg/kg wet	20,0	250		85	50-140		
Aroclor-1016 [2C]	232		μg/kg wet	20.0	250		93	50-140		
Arodor-1260	157		μg/kg wet	20.0	250		63	50-140		
Arodor-1260 [2C]	175		μg/kg wet	20.0	250		70	50-140		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	21.2		μg/kg wet		20.0		106	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	22.7		µg/kg wet		20.0		114	30-150		
Surrogate: Decachlorobiphenyl (Sr)	14.9		μg/kg wet		20.0		7 <b>4</b>	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	13.8		μg/kg wet		20.0		69	<i>30-</i> 150		
LCS Dup (1104683-BSD1)					Pn	epared: 17-	Mar-11 An	alyzed: 24-N	<u>lar-11</u>	
Aroclor-1016	213		μg/kg wet	20.0	250		85	50-140	0.9	30
Arodor-1016 [2C]	234		μg/kg wet	20.0	250		93	50-140	0.6	30
Aroclor-1260	161		µg/kg wet	20.0	250		64	50-140	2	30
Aroclor-1260 [2C]	183		μg/kg wet	20.0	250		73	50-140	4	30
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	20.6		μg/kg wet		20.0		103	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	22.1		μg/kg wet		20.0		111	30-150		
Surrogate: Decachlorobiphenyl (Sr)	14.3		µg/kg wet		20.0		72	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	15.4		μg/kg wet		20.0		77	30-150		
tch 1104688 - SW846 3540C										
Blank (1104688-BLK1)					Pr	epared: 17-	Mar-11 An	alyzed: 19-N	<u>1ar-1</u> 1	
Aroclor-1016	BRL		μg/kg wet	66.7						
Aroclor-1016 [2C]	BRL		μg/kg wet	66.7						
Aroclor-1221	BRL		μg/kg wet	66.7						
Aroclor-1221 [2C]	BRL		μg/kg wet	66.7						
Aroclor-1232	BRL		μg/kg wet	66.7						
Arodor-1232 [2C]	BRL		μg/kg wet	66.7						
Arocior-1242	BRL		μg/kg wet	66.7						
Arocior-1242 [2C]	BRL		Library Hot	55.7						

alyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limi
tch 1104688 - SW846 3540C										
Blank (1104688-BLK1)					Pre	epared: 17-	Mar-11 An	alyzed: 19-M	ar-11	
Aroclor-1248	BRL		μg/kg wet	66.7						
Arodor-1248 [2C]	BRL		μg/kg wet	66.7						
Aroclor-1254	BRL		μg/kg wet	66.7						
Aroclor-1254 [2C]	BRL		μg/kg wet	66.7						
Aroclor-1260	BRL		μg/kg wet	66.7						
Arodor-1260 [2C]	BRL		µg/kg wet	66.7						
Arodor-1262	BRL		µg/kg wet	66,7						
Aroclor-1262 [2C]	BRL		μg/kg wet	66.7						
Aroclor-1268	BRL.		μg/kg wet	66.7						
Aroclor-1268 [2C]	BRL		μg/kg wet	66.7						
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	87.7		μg/kg wet		66.7		132	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	64.3		μg/kg wet		66.7		97	30-150		
Surrogate: Decachlorobiphenyl (Sr)	68.7		μg/kg wet		66.7		103	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	75.7		μg/kg wet		66.7		114	30-150		
LCS (1104688-BS1)					Po	epared: 17-	Mar-11 An	alyzed: 19-M	ar-11	
Aractor-1016	558		μg/kg wet	66.7	833		67	50-140		
Arodor-1016 [2C]	666		μg/kg wet	66.7	833		80	50-140		
Aroclor-1260	514		μg/kg wet	66.7	833		62	50-140		
Arodor-1260 [2C]	525		μg/kg wet	66.7	833		63	50-140		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	57.7		μg/kg wet		66,7		86	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	59.7		μg/kg wet		66.7		89	30-150		
Surrogate: Decachlorobiphenyl (Sr)	48.3		μg/kg wet		66.7		72	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	51.7		μg/kg wet		66.7		78	30-150		
LCS Dup (1104688-BSD1)			, • •			enared: 17-		alyzed: 19-M	lar-11	
Aroclor-1016	781	QR2	μg/kg wet	66.7	833	202122	94	50-140	33	30
Aroclor-1016 [2C]	727		µg/kg wet	66,7	833		87	50-140	9	30
Aroclor-1260	708	QR2	µg/kg wet	66.7	833		85	50-140	32	30
Aroclo <i>r</i> -1260 [2C]	649		μg/kg wet	66.7	833		78	50-140	21	30
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)										
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	85.3 61.7		μg/kg wet		66.7		128	30-150		
			µg/kg wet		66.7		92	30-150		
Surrogate: Decachlorobiphenyl (Sr)	73.3		μg/kg wet		66.7	•	110	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	62.7		μg/kg wet		66.7		94	30-150		
Duplicate (1104688-DUP1)	DD!		Source: SB		20		Mar-11 An	alyzed: 19-N	lar-11	
Aroclor-1016	BRL		μg/kg dry	67.6		BRL				40
Aroclor-1016 [2C]	BRL		μg/kg dry	67.6		BRL				40
Aroclor-1221	BRL		μg/kg dry	67.6		BRL				40
Aroclor-1221 [2C] Aroclor-1232	BRL		μg/kg dry	67.6		BRL				40
	BRL		μg/kg dry	67.6		BRL				40
Aroclor-1232 [2C]	BRL		μg/kg dry	67.6		BRL				40
Aroclor-1242	BRL,		µg/kg dry	67.6		BRL				40
Aroclor-1242 [2C]	BRL		μg/kg dry	67.6 67.6		BRL				40
Aroclor-1248 Aroclor-1248 [2C]	BRL		μg/kg dry	67.6		BRL				40
Aroclor-1248 [2C] Amelor-1354	BRL		μg/kg dry	67.6		BRL				40
Aroclor-1254 Aroclor-1254 [2C]	BRL		μg/kg dry	67.6 °		BRL				40
Aroctor-1264 [2C] Aroctor-1260	BRL		µg/kg dry	67.6		BRL				40
	BRL		μg/kg dry	67.6		BRL				40
Arodor-1260 (2C) Arodor-1262	BRL BBI		µg/kg dry	67.6		BRL				40
	BRL		µg/kg dry	67.6		BRL				40 40
Aroclor-1262 [2C]	BRL		μg/kg dry	67.6		BRL				

nalyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limi
atch 1104688 - SW846 3540C										
<u>Duplicate (1104688-DUP1)</u>			Source: SB:	25773-17	Pre	epared: 17-	Mar-11 An	alyzed: 19-M	lar-11	
Aroclor-1268 [2C]	BRL		µg/kg dry	67:6	_	BRL				40
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	55.8		μg/kg dry		67,6		82	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	49.4		µg/kg dry		67.6		73	30-150		
Surrogate: Decachlorobiphenyl (Sr)	51.4		µg/kg dry		67.6		76	30-150		
Surrogate: Decachiorobiphenyl (Sr) [2C]	58.2		µg/kg dry		67.6		86	30-150		
Matrix Spike (1104688-MS1)			Source: SB:	25773-17		enared: 17-		alyzed: 19-M	lar11	
Aroclor-1016	498		µg/kg dry	66.7	834	BRL	60	40-135		
Arodor-1016 [2C]	503		μg/kg dry	66.7	834	BRL	60	40-135		
Aroclor-1260	677		μg/kg dry	66,7	834	BRL	81	40-135		
Aroclor-1260 [2C]	698		µg/kg dry	66,7	834	BRL	84	40-135		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	42.1		μg/kg dry		66.7		63	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	35.4		µg/kg dry		66.7		53 53	30-150		
Surrogate: Decachlorobiphenyl (Sr)	62.1		μg/kg dry		66.7		93	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	53.1		μαγγα αιλ		66.7		80	30-150		
Matrix Spike Dup (1104688-MSD1)			Source: SB:	25772 47		angend: 17		alyzed: 19-M	10-11	
Arodor-1016	437		μg/kg dry	66.2	828	BRL	53	40-135		20
Aroclor-1016 [2C]	455		hayka qık	66,2	828	BRL	55 55		12	30
Aroclor-1260	701		μg/kg dry	66.2	828	BRL	85	40-135 40-135	9 4	30 30
Aroclor-1260 [2C]	686		µg/kg dry	66.2	828	BRL	83	40-135	0.9	30
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	38,4					0110			0.3	30
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	35,8		µg/kg đry		66.2		58	30-150		
Surrogate: Decachlorobiphenyl (Sr)	63,9		µg/kg dry		66.2		54	30-150		
Surrogate: Decachiorobiphenyi (Sr) [2C]	59.6		µg/kg dry µg/kg dry		66.2 66.2		96 90	30-150 30-150		
Blank (1104724-BLK1) Aroclor-1016	BRL		μg/kg wet	66.7	<u>Pn</u>	epared: 18-	Mar-11 An	ialyzed: 24-N	<u>lar-11</u>	
Arodor-1016 [2C]	BRL		μg/kg wet	66.7						
Aroclor-1221	BRL		μg/kg wet	66.7						
Aroclor-1221 [2C]	BRL		μg/kg wet	66.7						
Aroclor-1232	BRL		μg/kg wet	66.7						
Aroclor-1232 [2C]	BRL		μg/kg wet	66.7						
Aroclor-1242 .	BRL		μg/kg wet	66.7						
Aroclor-1242 [2C]	BRL		μg/kg wet	66.7						
Aroclor-1248	BRL		μg/kg wet	66.7						
Aroclor-1248 [2C]	BRL		μg/kg wet	66.7						
Aroclor-1254	BRL		μg/kg wet	66,7						
Arodor-1254 [2C]	BRL		μg/kg wet	66,7						
Arodor-1260	BRL		μg/kg wet	66.7						
Arodor-1260 [2C]	BRL		μg/kg wet	66,7						
Arodor-1262	BRL		μg/kg wet	66,7						
Arodor-1262 [2C]	BRL		μg/kg wet	66,7						
Aroclor-1268	8RL		μg/kg wet	66.7	•					
Aroclor-1268 [2C]	BRL		μg/kg wet	66.7						
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	45.0		μg/kg wet		66.7		67	30-150		
	52.7		μg/kg wet		66.7		79	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]			μg/kg wet		66.7		62	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C] Surrogate: Decachlorobiphenyl (Sr)	41.7									
	41.7 32.0		μg/kg wet		66.7		48	3 <b>0</b> -150		
Surrogate: Decachlorobiphenyl (Sr)						epared: 18-		30-150 nalyzed: 24-N	<u> Mar-11</u>	
Surrogate: Decachlorobiphenyl (Sr) Surrogate: Decachlorobiphenyl (Sr) [2C]				66.7		epared: 18-			<u> Mar-11</u>	

nalyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limi
ntch 1104724 - SW846 3540C			•							
LCS (1104724-BS1)					Po	epared: 18-	Mar-11 A	nalyzed: 24-M	lar-11	
Aroclor-1260	541		μg/kg wet	66.7	833		65	50-140		
Aroclor-1260 [2C]	539		µg/kg wet	66.7	833	•	65	50-140		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	55.7		μg/kg wet	····	66.7		84	30-150		••••
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	64,7		µg/kg wet		66.7		97	30-150		
Surrogate: Decachiorobiphenyl (Sr)	48.0		µg/kg wet		66.7		72	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	41.0		μg/kg wet		66.7		62	30-150		
LCS Dup (1104724-BSD1)					Pn	epared: 18-	Mar-11 A	nalyzed: 24-M	lar-11	
Aroclor-1016	732		μg/kg wet	66.7	833		88	50-140	12	30
Araclor-1016 [2C]	776		μg/kg wet	66,7	833		93	50-140	2	30
Aroclor-1260	611		μg/kg wet	66.7	833		73	50-140	12	30
Aroclor-1260 [2C]	537		µg/kg wet	66.7	833		64	50-140	0.4	30
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	61,3		μg/kg wet		66.7		92	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	65.0		µg/kg wet		66.7		97	30-150		
Surrogate: Decachlorobiphenyl (Sr)	51.7		μg/kg wet		66.7		78	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	43.7		µg/kg wet		66.7		66	30-150		
Duplicate (1104724-DUP1)			Source: SB	25773-30		epared: 18-	Mar-11 A	nalyzed: 24-M	lar-11	
Aroclor-1016	BRL		µg/kg dry	59.6		BRL				40
Arocior-1016 [2C]	BRL		μg/kg dry	59.6		BRL				40
Arodor-1221	BRL		μg/kg dry	59.6		BRL				40
Aroclor-1221 [2C]	BRL		μg/kg dry	59.6		BRL				40
Aroclor-1232	BRL		µg/kg dry	59.6		BRL				40
Aroclor-1232 [2C]	BRL		μg/kg dry	59.6		BRL				40
Aroclor-1242	BRL		μg/kg dry	59.6		BRL				40
Aroclor-1242 [2C]	BRL		μg/kg dry	59,6		BRL				40
Aroclor-1248	BRL		μg/kg dry	59.6		BRL				40
Aroclor-1248 [2C]	BRL		μg/kg dry	59.6		BRL				40
Aroclor-1254	144		µg/kg dry	59.6		116			21	40
Aroclor-1254 [2C]	139		μg/kg dry	59,6		126			10	40
Aroclor-1260	BRL		μg/kg dry	59.6		BRL				40
Aroclor-1260 [2C]	BRL		μg/kg dry	59.6		BRL				40
Aroclor-1262	BRL		μg/kg dry	59.6		BRL				40
Aroclor-1262 [2C]	BRL		μg/kg dry	59.6		BRL				40
Aroclor-1268	BRL		μg/kg dry	59,6		BRL				40
Aroclor-1268 [2C]	BRL		μg/kg dry	59.6		BRL				40
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	50.9		μg/kg dry		59.6		86	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	57.2		μg/kg dry		59.6		96	30-150		
Surrogate: Decachlorobiphenyl (Sr)	45.0		μg/kg dry		59,6		76	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	41.4		μg/kg dry		59.6		70	30-150		
Matrix Spike (1104724-MS1)			Source: SB	25773-30	Pr	repared: 18	-Mar-11 A	nalyzed: 24-N	/ar-11	
Aroclor-1016	580		μg/kg dry	52,2	652	BRL	89	40-135		
Araclor-1016 [2C]	649		μg/kg dry	52.2	652	BRL	99	40-135		
Aroclor-1260	517		μg/kg dry	52.2	652	BRL	79	40-135		
Aroclor-1260 [2C]	506		μg/kg dry	52.2	652	BRL	78	40-135		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	46.7	<del></del>	μg/kg dry		52.2		90	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	48.5		µg/kg dry		52.2		93	30-150		
Surrogate: Decachlorobiphenyl (Sr)	37.6		µg/kg dry		52.2		72	30-150		
Surrogate: Decachlorobiphenyi (Sr) [2C]	36.0		µg/kg dry		52.2		69	30-150 30-150		
Matrix Spike Dup (1104724-MSD1)	30.0		Source: SB	25773.20		renared: 19		nalyzed: 24-N	Aar-11	
Aroclor-1016	712			63.4	793	BRL	90	40-135	0.9	30
Arodor-1016 [2C]	756		μg/kg dry μg/kg dry	63.4	793 793	BRL	95	40-135	4	30

nalyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPE Limi
atch 1104724 - SW846 3540C										
Matrix Spike Dup (1104724-MSD1)			Source: SB	25773-30	· Pre	epared: 18-l	Mar-11 An	alyzed: 24-M	lar-11	
Aroclor-1260	617		µg/kg dry	63.4	793	BRL	78	40-135	2	30
Aroclor-1260 [2C]	605		µg/kg dry	63.4	793	BRL	76	40-135	2	30
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	<i>56</i> ,5		µg/kg đry		63.4		89	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	61.9		µg/kg dry		63.4		97	30-150		
Surrogate: Decachlorobiphenyl (Sr)	49.5		µg/kg dry		63.4		7B	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	42.2		µg/kg dry		63.4		66	30-150		
atch 1104796 - SW846 3540C										
Blank (1104796-BLK1)					<u>Pre</u>	epared: 18-	Mar-11 An	alyzed: 21-M	lar-11	
Arodor-1016	BRL		μg/kg wet	20.0					<del>,</del>	
Arodor-1016 [2C]	BRL		µg/kg wet	20.0						
Aroclor-1221	BRL		µg/kg wet	20.0						
Arodor-1221 [2C]	BRL		μg/kg wet	20.0						
Aroclor-1232	BRL		μg/kg wet	20.0						
Arodor-1232 [2C]	BRL		μg/kg wet	20.0						
Aroclor-1242	BRL		µg/kg wet	20,0						
Arocior-1242 [2C]	BRL		μg/kg wet	20.0						
Aroclor-1248	BRL		μg/kg wet	20.0						
Arodor-1248 [2C]	BRL		μg/kg wet	20.0						
Arodor-1254	BRL		μg/kg wet	20.0						
Arodor-1254 [2C]	BRL		μg/kg wet	20.0						
Aroclor-1260	BRL		μg/kg wet	20.0						
Aroclor-1260 [2C]	BRL		µg/kg wet	20.0						
Arodor-1262	BRL		µg/kg wet	20.0						
Aroclor-1262 [2C]	BRL		µg/kg wet	20.0						
Aroclor-1268	BRL		μg/kg wet	20.0						
Aroclor-1268 [2C]	BRL		μg/kg wet	20.0						
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	22.7		µg/kg wet		20.0		114	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	17.4		µg/kg wet		20.0		87	30-150		
Surrogate: Decachlorobiphenyl (Sr)	20.0		µg/kg wet		20.0		100	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	14.2		µg/kg wet		20.0		71	30-150		
LCS (1104796-BS1)					Pre	epared: 18-	Mar-11 An	alyzed: 21-N	lar-11	
Arodor-1016	226		µg/kg wet	20.0	250		90	50-140		
Aroclor-1016 [2C]	223		µg/kg wet	20.0	250		89	50-140		
Aroclor-1260	235		μg/kg wet	20.0	250		94	50-140		
Arodor-1260 [2C]	212		μg/kg wet	20.0	250		85	50-140		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	20.5		μg/kg wet		20.0		103	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	18.2		μg/kg wet		20.0		91	30-150		
Surrogate: Decachlorobiphenyl (Sr)	23.3		μg/kg wet		20.0		117	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	17.1		μg/kg wet		20.0		86	30-150		
LCS Dup (1104796-BSD1)					Pre	pared: 18-	Mar-11 An	alyzed: 21-N	lar-11	
Arocior-1016	220		μg/kg wet	20.0	250		88	50-140	3	30
Aroclor-1016 [2C]	219		µg/kg wet	20.0	250		88	50-140	2	30
Aroclor-1260	241		μg/kg wet	20.0	250		96	50-140	2	30
Arodor-1260 [2C]	220		μg/kg wet	20.0	250		88	50-140	4	30
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	20.4		μg/kg wet		20.0		102	30-150		····
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	18.0		μg/kg wet		20.0		90	30-150		
Surrogate: Decachlorobiphenyl (Sr)	23.1 .		μg/kg wet		20.0		116	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	16.8		μg/kg wet		20.0		84	30-150		

#### General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1104690 - General Preparation										
<u>Duplicate (1104690-DUP1)</u>			Source: SE	325773-33	Pre	epared & A	nalyzed: 17-	-Mar-11		
% Solids	97.9		%			97.9	******		0.04	20
Batch 1104696 - General Preparation										
Duplicate (1104695-DUP1)			Source: SE	325773-01	Pre	epared & A	nalyzed: 17-	-Mar-11		
% Solids	82.3		%			77.4			6	20
Batch 1104699 - General Preparation										
Duplicate (1104699-DUP1)			Source: SE	325773-2 <u>1</u>	Pre	epared & Ar	nalyzed: 17-	-Mar-11		
% Solids	98.0		%			98.3			0.3	20

#### Notes and Definitions

QR2 The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.

S02 The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

BRL Below Reporting Limit - Analyte NOT DETECTED at or above the reporting limit

dry Sample results reported on a dry weight basis

NR Not Reported

RPD Relative Percent Difference

A plus sign (+) in the Method Reference column indicates the method is not accredited by NELAC.

<u>Laboratory Control Sample (LCS)</u>: A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

<u>Continuing Calibration Verification:</u> The calibration relationship established during the initial calibration must be verified at periodic intervals. Concentrations, intervals, and criteria are method specific.

Validated by: June O'Connor Nicole Leja Rebecca Merz

# Reasonable Confidence Protocols Laboratory Analysis QA/QC Certification Form

Laboratory Name: Spectrum Analytical, Inc.

Client: TRC - Windsor, CT

Project Location: Quirk Middle School - Hartford, CT

Project Number: 181125.1000.0000

Sampling Date(s):

Laboratory Sample ID(s):

3/15/2011

SB25773-01 through SB25773-50

RCP Methods Used: SW846 8082A

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence Protocol documents?	✓ Yes	No
1A	Were the method specified preservation and holding time requirements met?	✓ Yes	No
1B	<u>VPH and EPH methods only</u> : Was the VPH or EPH method conducted without significant modifications (see Section 11.3 of respective RCP methods)?	Yes	No
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	✓ Yes	No
3	Were samples received at an appropriate temperature?	Yes	✓ No
4	Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved?	Yes	✓ No
5	a) Were reporting limits specified or referenced on the chain-of-custody? * b) Were these reporting limits met? * Exceptions are defined by qualifiers	Yes Yes	✓ No No
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	✓ Yes	No
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	✓ Yes	No

Note: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet the requirements for "Reasonable Confidence."

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for obtaining the information contained in this analytical report, such information is accurate and complete.

Nicole Leja Laboratory Director

Date: 3/24/2011

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			PARAMETERS												を						Relinquished by: (Signature)			
	CHAIN OF CUSTODY		PA			·SE) :	EPA 8082	×	×	×	×	×	×	×	×	X	X	×	X		Relinquishe	(Printed)		
	CHAIN	PROJECT NAME	Quirk Middle School, Hartford, CT	(TED)	Jennifer Peshka & Hilton Hernandez		MATERIAL	Soil	Asphalt	Asphalt	Asphalt	Asphalt	Concrete	Concrete	Asphalt	Asphalt	Asphalt	Asphalt	Concrete		Received by: (Signature)	(Printed)		
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	CHAIN OF CUSTODY	PROJECT NAME Quirk Middle School, Harfford, CT	(PRINTED) Jennifer Peshka & Hilton Hernandez	TYPE	GRAB MATERIAL	X Concrete	X Concrete			
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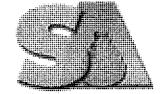
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Page 5 of 5						

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☐ Re-Issued Report

☐ Revised Report

Report Date: 25-Mar-11 14:37



# SPECTRUM ANALYTICAL, INC. Featuring HANIBAL TECHNOLOGY Laboratory, Report

Laboratory Report

Project: Quirk Middle School - Hartford, CT

Project #: 181125.1000.0000

TRC 21 Griffin Road North Windsor, CT 06095 Attn: Jen Peshka

Laboratory ID	Client Sample ID	<u>Matrix</u>	Date Sampled	Date Received
SB25896-01	50A-SC	Concrete	18-Mar-11 09:10	21-Mar-11 12:35
SB25896-02	51-SC	Asphalt	18-Mar-11 09:11	21-Mar-11 12:35
SB25896-03	52-SC	Asphalt	18-Mar-11 09:15	21-Mar-11 12:35
SB25896-04	53-SC	Asphalt	18-Mar-11 09:18	21-Mar-11 12:35
SB25896-05	54-SC	Asphalt	18-Mar-11 09:21	21-Mar-11 12:35
SB25896-06	55-SC	Asphalt	18-Mar-11 09:24	21-Mar-11 12:35
SB25896-07	56-SC	Asphalt	18-Mar-11 09:27	21-Mar-11 12:35
SB25896-08	57-SC	<b>A</b> sph <b>a</b> lt	18-Mar-11 09:32	21-Mar-11 12:35
SB25896-09	58-Soil	Soil	18-Mar-11 09:36	21-Mar-11 12:35
SB25896-10	59-Soil	Soil	18-Mar-11 09:39	21-Mar-11 12:35
SB25896-11	60-Soil	Soil	18-Mar-11 09:43	21-Mar-11 12:35
SB25896-12	61-Soil	Soil	18-Mar-11 09:48	21-Mar-11 12:35
SB25896-13	62-Soil	Soil	18-Mar-11 09:55	21-Mar-11 12:35
SB25896-14	63-sc	Concrete	18-Mar-11 10:01	21-Mar-11 12:35
SB25896-15	64-sc	Concrete	18-Mar-11 10:07	21-Mar-11 12:35
SB25896-16	65-sc	Concrete <sup>.</sup>	18-Mar-11 10:12	21-Mar-11 12:35
SB25896-17	66-sc	Concrete	18-Mar-11 10:18	21-Mar-11 12:35
SB25896-18	67-sc	Concrete	18-Mar-11 10:23	21-Mar-11 12:35
SB25896-19	68-sc	Concrete	18-Mar-11 10:28	21-Mar-11 12:35
SB25896-20	69-sc	Concrete	18-Mar-11 10:33	21-Mar-11 12:35
SB25896-21	70-sc	Concrete	18-Mar-11 10:39	21-Mar-11 12:35
SB25896-22	71-sc	Concrete	18-Mar-11 10:45	21-Mar-11 12:35
SB25896-23	72-sc	Concrete	18-Mar-11 10:51	21-Mar-11 12:35
SB25896-24	73-sc	Concrete	18-Mar-11 10:57	21-Mar-11 12:35
SB25896-25	74-sc	Concrete	18-Mar-11 11:01	21-Mar-11 12:35
SB25896-26	75-sc	Concrete	18-Mar-11 11:08	21-Mar-11 12:35
SB25896-27	76-sc	Concrete	18-Mar-11 11:13	21-Mar-11 12:35
SB25896-28	77-sc	Concrete	18-Mar-11 11:18	21-Mar-11 12:35
SB25896-29	78-sc	Concrete	18-Mar-11 11:23	21-Mar-11 12:35
SB25896-30	79-sc	Concrete	18-Mar-11 11:29	21-Mar-11 12:35
SB25896-31	80-sc	Concrete	18-Mar-11 11:34	21-Mar-11 12:35
SB25896-32	81-sc	Concrete	18-Mar-11 11:39	21-Mar-11 12:35
SB25896-33	82-sc	Concrete	18-Mar-11 11:44	21-Mar-11 12:35
SB25896-34	83-sc	Concrete	18-Mar-11 11:50	21-Mar-11 12:35
SB25896-35	84-sc	Concrete	18-Mar-11 11:58	21-Mar-11 12:35
SB25896-36	85-sc	Concrete	18-Mar-11 12:03	21-Mar-11 12:35
SB25896-37	86-sc	Concrete	18-Mar-11 12:08	21-Mar-11 12:35

SB25896-38	87-sc	Concrete	18-Mar-11 12:40	21-Mar-11 12:35
SB25896-39	88-sc	Concrete	18-Mar-11 12:45	21-Mar-11 12:35
SB25896-40	89-sc	Concrete	18-Mar-11 12:49	21-Mar-11 12:35
SB25896-41	90-sc	Concrete	18-Mar-11 12:54	21-Mar-11 12:35
SB25896-41 SB25896-42	91-sc	Concrete	18-Mar-11 13:02	21-Mar-11 12:35
SB25896-42	92-sc	Concrete	18-Mar-11 13:08	21-Mar-11 12:35
SB25896-44	93-sc	Concrete	18-Mar-11 13:13	21-Mar-11 12:35
SB25896-45	94-sc	Concrete	18-Mar-11 13:18	21-Mar-11 12:35
SB25896-46	95-sc	Concrete	18-Mar-11 13:24	21-Mar-11 12:35
SB25896-47	96-sc	Concrete	18-Mar-11 13:30	21-Mar-11 12:35
SB25896-48	97-Soil	Soil	18-Mar-11 13:33	21-Mar-11 12:35
	98-Soil	Soil	18-Mar-11 13:38	21-Mar-11 12:35
SB25896-49		Soil	18-Mar-11 13:44	21-Mar-11 12:35
SB25896-50	99-Soil	Soil	18-Mar-11 13:50	21-Mar-11 12:35
SB25896-51	100-Soil		18-Mar-11 13:55	21-Mar-11 12:35
SB25896-52	101-sc	Asphalt	18-Mar-11 14:00	21-Mar-11 12:35
SB25896-53	102-sc	Asphalt		21-Mar-11 12:35
SB25896-54	103-sc	Asphalt	18-Mar-11 14:03	Z1-Wim-11 12:55

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.

All applicable NELAC requirements have been met.

Massachusetts # M-MA138/MA1110 Connecticut # PH-0777 Florida # E87600/E87936 Maine # MA138 New Hampshire # 2538 New Jersey # MA011/MA012 New York # 11393/11840 Pennsylvania # 68-04426/68-02924 Rhode Island # 98 USDA # S-51435



Authorized by:

Nicole Leja Laboratory Director

Vicole Seja

Spectrum Analytical holds certification in the State of New York for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of New York does not offer certification for all analytes.

Please note that this report contains 66 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Spectrum Analytical, Inc.

Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Spectrum is currently accredited for the specific method or analyte indicated. Please refer to our "Quality" web page at www.spectrum-analytical.com for a full listing of our current certifications and fields of accreditation. States in which Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (NY-11840, FL-E87936 and NJ-MA012).

#### CASE NARRATIVE:

The sample temperature upon receipt by Spectrum Analytical courier was recorded as 3.6 degrees Celsius. The samples were transported on ice to the laboratory facility and the temperature was recorded at 0.5 degrees Celsius upon receipt at the laboratory. Please refer to the Chain of Custody for details specific to sample receipt times.

An infrared thermometer with a tolerance of +/- 2.0 degrees Celsius was used immediately upon receipt of the samples.

If a Matrix Spike (MS), Matrix Spike Duplicate (MSD) or Duplicate (DUP) was not requested on the Chain of Custody, method criteria may have been fulfilled with a source sample not of this Sample Delivery Group.

Required site-specific Matrix Spike/Matrix Spike Duplicate (MS/MSD) must be requested by the client and sufficient sample must be submitted for the additional analyses. Samples submitted with insufficient volume/weight will not be analyzed for site specific MS/MSD, however a batch MS/MSD may be analyzed from a non-site specific sample.

CTDEP has published a list of analytical methods which provides a series of recommended protocols for the acquisition, analysis and reporting of analytical data in support of decisions being made utilizing the Reasonable Confidence Protocol (RCP). "Reasonable Confidence" can be established only for those methods published by the CTDEP in the RCP guidelines. The compounds and/or elements reported were specifically requested by the client on the Chain of Custody and in some cases may not include the full analyte list as defined in the method. Regulatory limits may not be achieved if specific method and/or technique was not requested on the Chain of Custody.

The CTDEP RCP requests that "all non-detects and all results below the reporting limit are reported as ND (Not Detected at the Specified Reporting Limit)". All non-detects and all results below the reporting limit are reported as "BRL" (Below the Reporting Limit) in this report.

If no reporting limits were specified or referenced on the chain-of-custody the laboratory's practical quantitation limits were applied.

Tetrachloro-m-xylene is recommended as a surrogate by the CTDEP RCP for the following SW846 Methods 8081, 8082 and 8151. Spectrum Analytical, Inc. uses Tetrachloro-m-xylene as the Internal Standard for these methods and Dibromooctaflourobiphenyl as the surrogate.

See below for any non-conformances and issues relating to quality control samples and/or sample analysis/matrix.

#### SW846 8082A

#### Spikes:

1104883-MS1

Source: SB25896-13

The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.

Aroclor-1260 Aroclor-1260 [2C]

1104883-MSD1

Source: SB25896-13

The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.

Aroclor-1260 Aroclor-1260 [2C]

#### Duplicates:

1104885-DUP1

Source: SB25896-33

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

4,4-DB-Octafluorobiphenyl (Sr)

## SW846 8082A

#### Samples:

### S102218-CCV4

Analyte percent difference is outside individual acceptance criteria (15), but within overall method allowances.

Aroclor-1260 (1) [2C] (15.4%)

This affected the following samples:

100-Soil

101-sc

1104885-BLK1

82-sc

83-sc

84-sc

85-sc

86-sc

87-sc

88-sc

89-sc

90-sc

91-sc

92-sc 93-sc

94-sc

95-sc

96-sc

97-Soil

98-Soil

99-Soil

Sample Ide 50A-SC SB25896-0				Project # .1000.0000		<u>Matrix</u> Concrete		ction Date/ Mar-11 09		-	eived Mar-11	
	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Polychlorin	e Organic Compounds by GC nated Biphenyls by SW846 8082 by method SW846 3540C											
		BRL		mg/kg dry	0.0641	1	SW846 8082A	21-Mar-11	24-Mar-11	IMR	1104882	
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0641	1	15	н	**	11	п	Х
11141-18-5	Aroclor-1232	BRL		mg/kg dry	0.0641	1	a	н	**	**	n	Х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0641	1	Ħ	н	n	"	**	X
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0641	1	*1		"	11	"	Х
11097-69-1	Aroclor-1254	0.0922		mg/kg dry	0.0641	1	н		ч	11		X
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0641	1	19		"	•	н	X
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0641	1	*	**	н		*	X
11100-14-4	,	BRL		mg/kg dry	0.0641	11	#			н н		X
Surrogate i	recoveries:						**	**		11	10	
10386-84-2		98			30-150 %			" u	и	10	44	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	115			30-150 %		н		**	н .	19	
2051-24-3	Decachlorobiphenyl (Sr)	127			30-150 %		а	11		,		
2051-24-3	Decachlorobiphenyl (Sr) [2C]	122			30-150 %		45	**	"	"	,	
General C	Themistry Parameters % Solids	96.0		%		1	SM2540 G Mod	l. 22-Mar-1	1 22-Mar-1	1 GMA	110494	1

Sample Id 51-SC SB25896-	entification 02		Client Project # 181125.1000.0000		)	<u>Matrix</u> Asphalt		t 18-Mar-11 09:11				
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.264	1	SW846 8082A	21-Mar-11	24-Mar-11	IMR	1104882	X
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.264	1	. #	16	N	*	Ħ	X
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.264	1	n	-	#	н	**	Х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.264	1	**	**	17	н	"	X
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.264	1	10	н	н	**	н .	Х
11097-69-1	Aroclor-1254	4.01		mg/kg dry	0.264	1		n	w	**	4	X
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.264	1	a	11	17	п	**	X
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0,264	1	17	н	**	•	н	X
11100-14-4	Arocior-1268	BRL		mg/kg dry	0,264	1	R	•	н	10	· н	Х
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	109			30-150 %		ч	11	16	н	17	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	127			30-150 %		11	*	н	*1	"	
2051-24-3	Decachlorobiphenyl (Sr)	117			30-150 %		н	н	u	4	ы	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	106			30-150 %		- н	Ħ	11	н	"	
General C	hemistry Parameters											
	% Solids	98,1		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104941	ĺ

Sample Id <b>52-SC</b> SB25896-	dentification 03		-	<u>t Project #</u> 5.1000.0000		<u>Matrix</u> Asphalt		ection Date -Mar-11 09		-	ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	CerL
Semivolatí	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Areclor-1016	BRL		mg/kg dry	0.321	1	SW846 8082A	21-Mar-11	24-Mar-11	IMR	1104882	X
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.321	1	15	н	м	41	*1	Х
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.321	1	м	11	**	**	41	Х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.321	1	4	•	19	n	n	Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.321	1	**	•	Ħ	*	41	Х
11097-69-1	Aroclor-1254	0,836		mg/kg dry	0.321	1		àr .	**	и		Х
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.321	1	*	H	н	"	н	Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.321	1	ĸ	Ħ	•	"	-	X
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.321	. 1	19	п	10	н	et .	Х
Surrogate	recoveries:		•									
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	99			30-150 %		17	Ħ	•	*		
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	113			30-150 %		u		17	n	ď	
2051-24-3	Decachlorobiphenyl (Sr)	108			30-150 %		Ħ	н	N	#1	16	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	99			30-150 %		11	**	**	11	н	
General C	hemistry Parameters											

98.3

% Solids

Sample Id 53-SC SB25896-	entification 04			t.Project # 5.1000.0000	)	<u>Matrix</u> Asphalt		ection Date -Mar-11 09			<u>ceived</u> Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.293	1	SW846 8082A	21-Mar-11	24-Mar-11	IMR	1104882	Х
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0,293	1	N		19		#1	Х
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.293	1	"	n	м	*	**	Х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.293	1	ď	н	11	*	rŧ	Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.293	1	10	**	•	#	н	Х
11097-69-1	Aroclor-1254	0.479		mg/kg dry	0.293	1	m	**	**	•	n	Х
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.293	1	N	14	н	м	Ħ	Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.293	1	H	н	п	н		Х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.293	1		ы	ęi .	*	44	X
Surrogate i	recoveries:		•									
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	98			30-150 %		и	11	17		"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	114			30-150 %		и	16	"		и	
2051-24-3	Decachlorobiphenyl (Sr)	105			30-150 %		ч	н	n	н	н	
2051-24-3	Decachlorobiphenyi (Sr) [2C]	90			30-150 %		a	Ħ		**	ď	
General C	hemistry Parameters											
	% Solids	98.9		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104941	

<u>Sample Id</u> <b>54-SC</b> SB25896-	entification 05			Project # .1000.0000	)	<u>Matrix</u> Asphalt		ection Date. -Mar-11 09			<u>ceived</u> Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C	-										
12674-11-2	Aroclar-1016	BRL		mg/kg dry	0.226	1	SW846 8082A	21-Mar-11	24-Mar-11	IMR	1104882	X
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.226	1		+1	н	**		X
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.226	1	**	**	н	**		Х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.226	1	R	н	Ħ	н	41	X
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.226	1	н	"	47	"	10	X
11097-69-1	Aroclor-1254	2.59		mg/kg dry	0.226	1	н	п	u	#	н	X
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.226	1	#	11	н	14	н	X
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.226	1	<b>"</b>	п	n	н	41	Х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.226	1	и	•	a	Ħ	18	X
Surrogate r	ecoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyi (Sr)	103			30-150 %		•	"		17	н	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	102			30-150 %		# 1	**	11	н	н	
2051-24-3	Decachlorobiphenyl (Sr)	91			30-150 %		10	tt	*1	н	я	
2051-24-3	Decachlorobiphonyl (Sr) [2C]	80			30-150 %		*	**	H	•	4	
General C	hemistry Parameters											

% Solids

96.3

Sample Id 55-SC SB25896-	entification 06			t Project # 5.1000.0000	)	<u>Matrix</u> Asphalt		ction Date -Mar-11 09			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.277	1	SW846 8082A	21-Mar-11	24-Mar-11	IMR	1104882	×
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.277	1	ਜ਼		н	11	#	х
11141-16-5	Aroclar-1232	BRL		mg/kg dry	0.277	1	**	-	#	н	и	Х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.277	1	11	**		**	н	X
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.277	. 1	11	19	н	"	•	х
11097-69-1	Aroclor-1254	0.747		mg/kg dry	0.277	1	н	11	н	"	11	X
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.277	1	н	**	71	н		х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.277	1	41	10	**	"	n	X
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.277	1	19	14		11	**	х
Surrogate i	recoveries:									·		
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	88			30-150 %		Ħ	•	71	н	п	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	98			30-150 %		11	"	14	41	"	
2051-24-3	Decachlorobiphenyl (Sr)	81			30-150 %		19	.,	*	*	**	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	70			30-150 %		н	н		н	st	
General C	hemistry Parameters											
	% Solids	98.7		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104941	

Sample 16 56-SC SB25896-	dentification -07	_		t Project # 5.1000.0000	l	<u>Matrix</u> Asphalt		ection Date -Mar-11 09			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.149	1	SW846 8082A	21-Mar-11	24-Mar-11	IMR	1104882	х
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.149	1	н	. 19	**	4	**	х
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.149	1		-	•	••	•	х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.149	1	н	n	11	47	10	х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.149	1	4	**	•	10	10	х
11097-69-1	Aroclor-1254	1.07		mg/kg dry	0.149	1		**	10	•	10	х
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.149	1	N	**	er e		44	х
37324-23-5	Arodor-1262	BRL		mg/kg dry	0.149	1	**	41	10		•	х
11100-14-4	Arodor-1268	BRL		mg/kg dry	0.149	1	Ŋ	**	н	10	**	х
Surrogate i	recoveries:						· · · · · · · · · · · · · · · · · · ·					
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	100			30-150 %		н	vr	II.	н	н	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	109			30-150 %		**	11	u	h	Ħ	
2051-24-3	Decachlorobiphenyl (Sr)	95			30-150 %		и	11	н	п	19	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	76			30-150 %		•	я	n		н	
General C	hemistry Parameters											

% Solids

97.0

<u>Sample Id</u> <b>57-SC</b> SB25896-	lentification 08			<u>t Project #</u> .1000.0000	)	<u>Matrix</u> Asphalt		ection Date -Mar-11 09			<u>ceived</u> Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11 <b>-</b> 2	Aroclor-1016	BRL		mg/kg dry	0.113	1	SW846 8082A	21-Mar-11	24-Mar-11	IMR	1104882	X
11104-28-2	Arodor-1221	BRL		mg/kg dry	0.113	, 1	я	н	•	e	9	X
11141-16-5	Aroclor-1232	BRL	•	mg/kg dry	0.113	1		•		#	н	х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.113	1	it.	•	47	19	n	X
12672-29-6	Arodor-1248	BRL		mg/kg dry	0.113	1	n	11		н	**	X
11097-59-1	Aroclor-1254	0.979		mg/kg dry	0.113	1	•	н	**	н	**	X
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.113	1	н	и	**	п	10	Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.113	1	**		*1	4	**	X
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.113	1	Ħ	н	•1	н	H	X
Surrogate i	recoveries:											·····
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	90			30-150 %		u	**	. 11		"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	95			30-150 %		er .	**	11	Ħ	н	
2051-24-3	Decachlorobiphenyl (Sr)	76			30-150 %				19		**	
2051-24- <b>3</b>	Decachlorobiphenyl (Sr) [2C]	69			30-150 %		19	"	н	n	•	
General C	hemistry Parameters											
	% Solids	94.6		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104941	

58-Soil	entification			<u>t Project #</u> 5.1000.0000	)	<u>Matrix</u> Soil		ction Date Mar-11 09			ceived Mar-11	
SB25896- CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	CerL
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082											
	by method SW846 3540C											
12674-11-2	Arodor-1016	BRL		mg/kg dry	0.0253	1	SW846 8082A	21-Mar-11	24-Mar-11	IMR	1104882	X ·
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0253	1	**	н		11	**	X
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0253	1	Ħ	ut	ч	#F	н	X
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0253	1	и	11	я			Х
12672-29-6	Arodor-1248	BRL		mg/kg dry	0.0253	1		н	n	**	**	Х
11097-69-1	Aroclor-1254	0.313		mg/kg dry	0.0253	1	н	40	11		**	Х
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0253	1	п	н	u	41	19	Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0253	1	11	ar .	16	H	н ,	Х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0253	1	н	Ħ		"	**	х
Surrogate i	recoveries:										•	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	102			30-150 %		н	10		н	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	147			30-150 %		N	ű	N	н	"	
2051-24-3	Decachlorobiphenyl (Sr)	127			30-150 %	•	**	**	10	47	**	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	83			30-150 %		п	11	п		47	
General C	hemistry Parameters											
	% Solids	78.3		%		1	SM2540 G Mod.	22-Mar-11	1 22-Mar-11	GMA	1104941	

Sample Id 59-Soil SB25896-	entification 10			<u>t Project #</u> 5.1000.000	)	<u>Matrix</u> Soil	-	ection Date -Mar-11 09			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0233	1	SW846 8082A	21-Mar-11	24-Mar-11	IMR	1104882	X
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0233	1	**	**	н	н	a	X
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0,0233	1	11	H	Ħ	**	11	X
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0,0233	1	n	н	н	11		X
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0233	1	u	u	**	н	n	X
11097-69-1	Aroclor-1254	1.59		mg/kg dry	0.0233	1	19	н	11	**	4	Х
11098-82-5	Aroclor-1260	BRL		mg/kg dry	0,0233	1	ч	*1	н	н	44	Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0233	1	44	18	п	н	п	Х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0233	1			11		"	X
Surrogate i	recoveries:	•										
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	101			30-150 %		u	11	4	*1	n	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	117			30-150 %		14	И	14	•	**	
2051-24-3	Decachlorobiphenyl (Sr)	94			30-150 %			**	**	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	80			30-150 %		10	If	11	n	Ħ	
General C	hemistry Parameters											
	% Solids	79.4		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104941	í

Sample Id 60-Soil SB25896-	entification			<u>t Project #</u> 5.1000.0000		<u>Matrix</u> Soil		ection Date -Mar-11 09			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert
Semivolati	le Organic Compounds by GC								•			
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0278	1	SW846 8082A	21-Mar-11	24-Mar-11	IMR	1104882	X
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0278	1	н	n	H	14		X
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0278	1	n	Ħ	41	н	••	Х
53469-21-9	Arodor-1242	BRL		mg/kg dry	0.0278	1	14	er e	44	н	н	х
12672-29-6	Arodor-1248	BRL		mg/kg dry	0.0278	1		w	19	4	н	X
11097-69-1	Arodor-1254	0,153		mg/kg dry	0.0278	1	**	н	n		**	X
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0278	1	4	н	**	н	47	X
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0278	1	N	**	10	н	**	X
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0278	1	п	•	н	#		х
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	98			30-150 %		er e	н	**	н	**	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	129			30-150 %		и	*1		"	4	
2051-24-3	Decachlorobiphenyl (Sr)	123			30-150 %		n	**	11	#1	**	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	73			30-150 %		N .	**	14	**	14	
General C	hemistry Parameters											

% Solids

69.0

Sample Id 61-Soil SB25896-	lentification			t Project # 5.1000.000	)	<u>Matrix</u> Soil		ection Date -Mar-11 09			<u>ceived</u> Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Arodor-1016	BRL		mg/kg dry	0.0266	1	SW846 8082A	21-Mar-11	24-Mar-11	IMR	1104882	Х
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0266	1	**	н	•	•	**	Х
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0266	1	н	м	11	н	я	X
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0266	1	п	**	**	н		X
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0266	1	н	+1	N	*		х
11097-69-1	Aroclor-1254	0.275		mg/kg dry	0.0266	1	н	र्म	ti		н	X
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0266	1	**	n	**	#	н	Х
37324-23-5	Arodor-1262	BRL		mg/kg dry	0.0266	1	17	и	4	10	**	Х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0266	1		"	•	н	•	x
Surrogate r	ecoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	95			30-150 %				н	н	**	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	110			30-150 %		н	41	tt	"	49	
2051-24-3	Decachlorobiphenyl (Sr)	88			30-150 %		41	**	н	*	14	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	69			30-150 %		a	u	er	19	h	
General C	hemistry Parameters											
	% Solids	74.2		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104942	

Sample Id 62-Soil SB25896-	entification 13	•	Client Pr 181125.10		)	<u>Matrix</u> Soil		ection Date -Mar-11 09			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Ünits	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert
Polychlori	le Organic Compounds by GC nated Biphenyls by SW846 8082 by method SW846 3540C											
	Araclor-1016	BRL	m	g/kg dry	0.0243	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104883	X
11104-28-2	Aroclor-1221	BRL	m	g/kg dry	0.0243	1	#	14	10	#		Х
11141-18-5	Araclor-1232	BRL	m	ig/kg dry	0.0243	1		4	10	"		Х
53469-21-9	Aroclor-1242	BRL	m	ıg/kg dıy	0.0243	1	п	n	п	n	17	X
12672-29-6	Aroclor-1248	BRL	m	ıg/kg dry	0.0243	1	n		*t		н	X
11097-69-1	Aroclor-1254	2.22	m	ıg/kg dry	0.0243	1	ri	Ħ	10	41		X
11096-82-5	Aroclor-1260	BRL	m	ıg/kg dry	0.0243	1	11	*	N	R	**	Х
37324-23-5	Araclor-1262	BRL	m	ig/kg dry	0.0243	1	I#	Œ			**	X
11100-14-4	Aroclor-1268	BRL	m	ng/kg dry	0.0243	1	н	10	41	н	**	X
Surrogate i	ecoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	118			30-150 %		"	"	14	4	н	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	86			30-150 %		41	н	и	**	n	
2051-24-3	Decachlorobiphenyl (Sr)	94			30-150 %		u	11	n	fı	u	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	96			30-150 %		19	**	**	#	*	
General C	hemistry Parameters											
	% Solids	81.2		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104942	!

Sample Id 63-sc SB25896-	entification			Project # .1000.000	)	<u>Matrix</u> Concrete		ction Date -Mar-11 10			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC						•					
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0645	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104883	χ,
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0645	1	Ħ	n	11	u	и	Х
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0645	1		н	14	*		Х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0645	1	**	n	11	10	п	X
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0645	1	H	**	M.	н	•1	X
11097-69-1	Aroclor-1254	BRL		mg/kg dry	0.0645	1	и	n	11	n	47	Х
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0645	1	Ħ	11	н	Ħ	а	х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0645	1	н	e	n		н	Х
11100-14-4	Arocior-1268	BRL		mg/kg dry	0.0645	1	w	97	M	ш	н	X
Surrogate r	ecoveries:							····				
10386-84-2	4,4-DB-Octafiuorobiphenyl (Sr)	124			30-150 %		11	44	**	п	#	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	94			30-150 %		46	11	u	14		
2051-24-3	Decachlorobiphenyl (Sr)	104			30-150 %		19	19	10	н	ш	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	88			30-150 %		ч	16	н	u	**	
General C	hemistry Parameters											
	% Solids	97.3		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104942	

Sample Id 64-sc SB25896-	lentification			<u>t Project #</u> 5.1000.0000	)	<u>Matrix</u> Concrete		ction Date Mar-11 10			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C	•		•					•			
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0549	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104883	х
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0549	1	**	11	*	n	n	х
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0549	1	**	"		н	н	Х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0549	1	19	**	*	•	n	Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0549	1	N	*1	e	•		Х
11097-69-1	Aroclor-1254	0.917		mg/kg dry	0.0549	1	н	n	n	•	•	Х
11096-62-5	Aroclor-1260	BRL		mg/kg dry	0.0549	1	**	11	*	н	*	Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0549	1	11	н	н	, н	19	х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0549	1	**	н	. 11	п	н	Х
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	122			30-150 %			n	H	w	н	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	95			30-150 %		н	Ħ	n	•	"	
2051-24-3	Decachlorobiphenyl (Sr)	107			30-150 %		11	18	**	11	ď	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	86			30-150 %		41	10	н	b	41	
General C	hemistry Parameters											
	% Solids	98.3		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104942	

Sample Id 65-sc SB25896-	entification 16			t Project # 5.1000.0000		<u>Matrix</u> Concrete		ction Date. -Mar-11 10			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C		•									
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0660	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104883	X
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0660	1	e e	**	It	Ħ	н	X
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0660	1	4	11	н	**	**	Х
53469-21-9	Arocior-1242	BRL		mg/kg dry	0.0660	· 1	н	н			16	Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0660	1	я	*	• .	. "	н	X
11097-69-1	Aroclor-1254	1.00		mg/kg dry	0.0660	1	**	**	п	•	es	Х
11096-82-5	Aroctor-1260	BRL		mg/kg dry	0.0660	1	n	ır	н	4	**	Χ
37324-23-5	Aroclor-1262	BRL		mg/kg dry`	0.0660	1	н	•	н	"	**	Х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0660	1	ч	н	10	и	п	X
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	130			30-150 %		l#	, <b>n</b>	Ħ	49	41	
10386-84-2	4,4-DB-Octafluorobipheпуl (Sr) [2C]	98			30-150 %		"	14	•	"	и	
2051-24-3	Decachlorobiphenyl (Sr)	98			30-150 %		•	н	#	н	19	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	101			30-150 %		4	н	11	н	н	

General Chemistry Parameters % Solids

98.3

Sample Id 66-sc SB25896-	lentification			: <u>Project #</u> .1000.0000	)	<u>Matrix</u> Concrete		ction Date -Mar-11 10			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0684	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104883	Х
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0,0684	1	u	લ	ŧI	н		X
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0684	1	•	**	"	•	14	Х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0684	1	н	at .	10	47	•	Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0684	1	н	11	н	**	41	X
11097-69-1	Aroclor-1254	BRL		mg/kg dry	0.0684	1	•	•	*	11	**	Х
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0684	1	10	'n	**	н	le .	Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0684	1	10	•	14	•		х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0684	1	н	10	11	**	н	x
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	126			30-150 %		u	H	**	н	**	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	97			30-150 %		**	Ħ	**	н	**	
2051-24-3	Decachlorobiphenyl (Sr)	103			30-150 %		10	•		4		
2051-24-3	Decachlorobiphenyl (Sr) [2C]	102			30-150 %		n	10		ď	10	
General C	hemistry Parameters											
	% Solids	96.9		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104942	:

Sample Id	entification			<u>t Project #</u> 5.1000.0000	)	Matrix Concrete		ction Date			ceived Mar-11	
SB25896-	18				-	. \$1						
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0586	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104883	X
11104-28-2	Arocior-1221	BRL		mg/kg dry	0.0586	1	41	н	it	#	<b>59</b>	X
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0586	1	P	u	4	41		Х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0586	1	n	10	•	и		Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0586	1	н		**	N	**	Х
11097-69-1	Aroclor-1254	0.507		mg/kg dry	0.0586	1	11	**		*	44	Х
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0586	1	10	п	н	U	11	Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0586	1		10	**	"	н	X
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0,0586	1	•	11	**	н	**	Х
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	118			30-150 %		Ħ	н	н	**	10	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	91			30-150 <b>%</b>		н		ď	н	н	
2051-24-3	Decachlorobiphenyl (Sr)	99			30-150 %		11	**	"	a	•	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	90			30-150 %		14	11	**	**	u	
General C	hemistry Parameters											
	% Solids	96.3		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104942	<u>!</u>

68-sc	Sample Identification 68-sc SB25896-19		Client Project # 181125.1000.0000		Matrix Concrete	Collection Date/Time 18-Mar-11 10:28			Received 21-Mar-11			
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC						!					
	nated Biphenyls by SW846 8082 by method SW846 3540C					,						
12674-11-2	Arodor-1016	BRL		mg/kg dry	0.0641	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104883	×
11104-28-2	Arodor-1221	BRL		mg/kg dry	0.0641	1	н		н	**	19	X
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0641	1	•	н	w	11	N	Х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0641	1	41	17	10	•	**	Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0641	1	**	11	и	Ħ	ŧŧ	X
11097-69-1	Aroclor-1254	BRL		mg/kg dry	0.0641	1		**		**		X
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0641	1	19	н	41	19	н	Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0641	1	н	**	10			Х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0641	1	*	1f	Ħ	н	**	Х
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	120			30-150 %		47	n	et	•	10	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	94			30-150 %		10	H	Ħ	"	**	
2051-24-3	Decachlorobiphenyl (Sr)	101			30-150 %		н	u	*	н	н	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	92			30-150 %		п	11	н	#	•	
General C	hemistry Parameters											
	% Solids	97.5		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104942	

69-sc	Sample Identification 69-sc SB25896-20		<u>Client Project #</u> 181125.1000.0000		)	<u>Matrix</u> Concrete	te 18-Mar-11 10:33			Received 21-Mar-11		
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0598	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104883	Х
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0598	1	41	N	**	#1	Ħ	Х
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0598	1	н	**	н	н	•	X
53469-21-9	Aroctor-1242	BRL		mg/kg dry	0.0598	1		н	**	**	10	X
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0598	1	18	u	at .	u	н	X
11097-69-1	Aroclor-1254	BRL		mg/kg dry	0,0598	1		*	н	н	17	X
11096-82-5	Aroctor-1260	BRL		mg/kg dry	0.0598	1	er	н	u u	u	н	Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0598	1	tt	u	*	n	•	Х
11100-14-4	Aroclar-1268	BRL		mg/kg dry	0.0598	1	н	n	и	н	"	X
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	117			30-150 %		10	•	71	19		
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	100			30-150 %		н	11	π	м	"	
2051-24-3	Decachlorobiphenyl (Sr)	98			30-150 %			н	**	**	**	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	90			30-150 %		11	#1	n	11	Ħ	
General C	hemistry Parameters											
	% Solids	98.0		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104942	:

70-sc	Sample Identification 70-sc SB25896-21		<u>Client Project #</u> 181125.1000.0000			<u>Matrix</u> Concrete	te 18-Mar-11 10:39				Received 21-Mar-11		
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert	
Polychlorii	le Organic Compounds by GC nated Biphenyls by SW846 8082 by method SW846 3540C												
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0630	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104863	Х	
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0630	1		11	"	10	17	X	
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0630	1		m	4		н	X	
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0630	· 1	•	47	н		**	X	
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0630	1		n	u	н	н	х	
11097-69-1	Arodor-1254	0.149		mg/kg dry	0.0630	1	•	**	19	II;	н	Х	
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0630	1	я	(4	н		10	х	
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0630	1	я	а	**	H	, н	X	
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0630	1	"	11	п	"	*	X	
Surrogate i	recoveries:												
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	120			30-150 %		41	**	M	**	*		
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	92			30-150 %		<b>H</b> .	п	н	H	**		
2051-24-3	Decachlorobiphenyl (Sr)	107			30-150 %		*	11	#	#	н		
2051-24-3	Decachlorobiphenyl (Sr) [2C]	85			30-150 %		11	'n	ŧı	н	41		
General C	hemistry Parameters												
	% Solids	97.2		%		1	SM2540 G Mod	22-Mar-11	1 22-Mar-11	GMA	1104942	2	

Sample Id	entification		Clien	t Project#		Matrix	<u>Colle</u>	ction Date	/Time	<u>Re</u>	ceived	
71-sc SB25896-	22		18112	5.1000.0000	)	Concrete	: 18-	-Mar-11 10	):45	21-	Mar-II	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0606	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104683	Х
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0606	1.	H	**		ìr	•	Х
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0606	1	-	**	н	н		X
53469-21-9	Aroclor-1242	BRL .		mg/kg dry	0.0606	1	**	*	*	*	11	Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0606	1	4	и	10	#		Х
11097-69-1	Aroclor-1254	BRL		mg/kg dry	0.0606	1	*	Ħ			"	Х
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0606	1	*	•	Tf.	н	ч	X
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0606	1	**	**	40	"	n	Х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0606	1	<b>10</b>	и	19	11	11	X
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	127			30-150 %		и	**	•	Ħ	**	
10386-84-2	4,4-DB-Octafluorobiphenyi (Sr) [2C]	95			30-150 %		11	11	4	н	**	
2051-24-3	Decachlorobiphenyl (Sr)	108			30-150 %		*	*	10	**	#	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	89			30-150 %		tt	н	н	10	14	
General C	hemistry Parameters											
	% Solids	97.6		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104942	<u>!</u>

Sample Identification 72-sc SB25896-23		181125.1000.0000 Co			Matrix Collection Date/Time Concrete 18-Mar-11 10:51				<u>Received</u> 21-Mar-11			
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0599	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104883	X
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0599	1	ч .	e		*	**	X
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0599	1	te	**	и	11	м	X
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0599	1	•	**		*		Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0599	1	4	н	#	н	IF.	X
11097-69-1	Aroclor-1254	0.0943		mg/kg dry	0.0599	1	**	•	14	•	н	X
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0599	1	11		er	н	**	X
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0599	1	**	н	•	н	4	X
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0599	1	**	и	н	**		х
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	111			30-150 %		. н	ď	•		*1	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	86			30-150 %		4	Ħ	н	Ħ	P	
2051-24-3	Decachlorobiphenyl (Sr)	104			30-150 %		- "	19	•		н	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	83			30-150 %		н	н	**	п	п	
General C	hemistry Parameters											
	% Solids	97.5		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104942	:

Sample Identification 73-sc SB25896-24		181125.1000.0000 Co			<u>Matrix</u> Concrete		ection Date -Mar-11 10		Received 21-Mar-11			
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0574	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104883	Х
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0574	1	ta .	Į1	n	п	#	Х
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0574	1	•	•	n	*	н	Х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0574	1	4	"	н	#	•	X
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0574	1	**	"		н	41	Х
11097-69-1	Aroclor-1254	0.105		mg/kg dry	0.0574	1	n	n	u	4	**	Х
11096-82-5	Aroclor-1260	BRL		mg/kg dīy	0.0574	1	'n	н	#		11	х
37324-23-5	Aroclor-1262	BRL		mg/kg dīy	0.0574	1	*1	**	10	11	.,	х
11100-14-4	Arodor-1268	BRL		mg/kg dry	0.0574	1	uf	17	н	#	•	X
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	116			30-150 %			n	¥I	17	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	88			30-150 %		e	п	w	н	**	
2051-24-3	Decachlorobiphenyl (Sr)	109			30-150 %		**	11	10	70	**	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	90			30-150 %		**	10		16	4	
General C	hemistry Parameters											
	% Solids	97.1		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104942	<u> </u>

Sample Identification 74-sc SB25896-25			181125.1000.0000 C		<u>Matrix</u> Concrete	e 18-Mar-11 11:01			<u>Re</u> 21-			
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC						•					
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0523	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104883	Х
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0523	1	*	н	**	**		X
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0523	1	n	Ħ	er	Ħ	**	Х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0523	1	**	4	11	н	14	X
12672-29-6	Aroctor-1248	BRL		mg/kg dry	0.0523	1	10	. н	-	**	ŧI	Х
11097-69-1	Aroclor-1254	0.565		mg/kg dry	0.0523	1	п.	*1	17	"	19	Х
11096-82-5	Aroctor-1260	BRL		mg/kg dry	0.0523	1	н	11		**	10	Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0,0523	1	ď	19	**	#	н	Х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0523	1	16		а	11	"	×
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	113			30-150 %		н	117		44	14	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	86			30-150 %		Ħ	u	a	#	н	
2051-24-3	Decachlorobiphenyl (Sr)	95			30-150 %		11	н	11	н	**	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	92			30-150 %		н	91		ri	19	
General C	hemistry Parameters											
	% Solids	98.3		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104942	<u> </u>

Sample Identification 75-sc SB25896-26		Client Project # 181125.1000.0000			)	<u>Matrix</u> Concrete	te 18-Mar-11 11:08			<u>Re</u> -		
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0601	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104883	Х
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0601	1	10	*1	п	19	**	X
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0601	1	н	н	Ħ	и		X
53459-21-9	Aroclor-1242	BRL		mg/kg dry	0.0601	1	H	" .	**	•	н	X
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0601	1	10	u ·		н	**	X
11097-69-1	Aroclor-1254	0.235		mg/kg dry	0.0601	1	ы	11	11	**	44	X
11095-82-5	Aroclor-1260	BRL		mg/kg dry	0.0601	1	47	н	*1	"	н	Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0601	1	•	Ħ	u	н	**	Х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0,0601	1	**	"	"	**	"	Х
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	105			30-150 %		п	41	'n	u	**	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	84			30-150 %		*1	15	ŧı	**	10	
2051-24-3	Decachlorobiphenyl (Sr)	90			30-150 %		47	н	14		"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	74			30-150 %		н	er er	п	, "	"	
General C	hemistry Parameters											
	% Solids	97.9		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104942	<u> </u>

Sample Identification 76-sc SB25896-27		181125.1000.0000 Co			<u>Matrix</u> Concrete	***********	<u>/Time</u> ∶13	<u>Re</u> 21-				
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC										•	
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0547	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104883	Х
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0547	1	н	10	н	и	"	Х
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0547	1	н	н	**	**	н	Х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0547	1	*	**	#	14	••	Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0547	1	н	T	н	н	10	Х
11097-69-1	Aroclor-1254	0.0700		mg/kg dry	0.0547	1	*	N	*	**	н	Х
11096-62-5	Aroclor-1260	BRL		mg/kg-dry	0.0547	1	u	11	10	11	"	Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0547	1	*	10	п	н	n	Х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0547	1		н	*	*1	"	×
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	110			30-150 %		12	**		и	**	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	87			30-150 %		11	le .	u	Ħ	ŧr	
2051-24-3	Decachlorobiphenyl (Sr)	100			30-150 %		н	n	**	71	и	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	84			30-150 %		er .	4	111	10	н	
General C	hemistry Parameters						-					
	% Solids	96.9		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104942	<u>:</u>

Sample Identification 77-sc SB25896-28		181125.1000.0000 C			Matrix Concrete				Received 21-Mar-11			
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0640	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104883	X
11104-28-2	Arodor-1221	BRL		mg/kg dry	0.0640	1	<b>v</b> f	11	н	**	*1	X
11141-16-5	Arodor-1232	BRL		mg/kg dry	0.0640	1	**	u	ч	It	st	Х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0640	1	. *	н		н	19	х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0640	1	*	•	н	H	N	X
11097-69-1	Aroclor-1254	1.39		mg/kg dry	0.0640	1	п	rt	•	4		X
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0640	1	**	**	*	11	71	X
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0640	1	Ħ	н	19	н	**	X
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0640	1	#	Ħ	п	*	"	Х
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	108			30-150 %		u	**	**	16	н	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	84			30-150 %		¥f	ıt.	**	"	•	
2051-24-3	Decachlorobiphenyl (Sr)	96			30-150 %		17	"	u	•	**	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	130			30-150 %		n	n	n	н	10	
General C	hemistry Parameters											
	% Solids	98.5		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104942	

78-sc	Sample Identification 78-sc SB25896-29		181125.1000,0000		Concrete 18-		lection Date/Time 8-Mar-11 11:23		Received 21-Mar-11			
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	CerL
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0611	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104883	X
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0611	1	n	*	n	н	н	Х
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0611	1	н	H	•	н	M	Х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0611	1	n	н	14	47	41	X
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0611	1	н	n	14	te	**	X
11097-69-1	Aroclor-1254	0.0760		mg/kg dry	0.0611	1	10	*1	н	н	rŧ	X
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0,0611	1	H	IF.	•	н	н	X
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0611	1	н			"	н	X
11100-14-4	Aroclar-1268	BRL		mg/kg dry	0.0611	1	n	n	10	#	н	X
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	123			30-150 %		19	11	eri	n		
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	98			30-150 %	,	10	10	11	н	"	
2051-24-3	Decachlorobiphenyl (Sr)	110			30-150 %		н		н	**	н	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	141			30-150 %		"	Ħ	п	1F	ы	
General C	hemistry Parameters											
	% Salids	98.4		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104942	:

Sample Id 79-sc SB25896-	lentification			t <u>Project #</u> 5,1000,0000	)	<u>Matrix</u> Concrete	· · · · · · · · · · · · · · · · · · ·	ction Date Mar-11 11			ceived Mar-11	
CAS No.	Analytė(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Arodor-1016	BRL		mg/kg dry	0.0549	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104883	X
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0549	1	111	"	17	"		Х
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0549	1	M	я	II.	n	н	Х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0549	1	Ħ	н	п	N	W.	Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0549	1	u	•	*	Ħ	19	Х
11097-69-1	Aroclor-1254	8.78		mg/kg dry	0.0549	1	14	ti	÷τ	er .	14	Х
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0549	1	•	**	14	4	**	Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0549	1	и	II.	19	и	н	Х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0549	1	н	n	*1	n	"	X
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	124			30-150 %		н	**	10	"	н	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	96			30-150 %		н	41	н	46	fi	
2051-24-3	Decachlorobiphenyl (Sr)	111			30-150 %		**	н	•	н	н	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	99			30-150 %		**	n	•	•	**	
General C	hemistry Parameters											
	% Solids	97.2		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104942	

Sample Id 80-sc SB25896-	lentification			t <u>Project #</u> 5.1000.0000		Matrix Concrete		ction Date. Mar-11 11			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	lle Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0570	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104883	Х
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0570	1		n	и	•		Х
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0,0570	1	n	'n	u	HF.	Ħ	Х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0570	1	н	*1	#	**	4	Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0570	1	**	10	н	н	•	X
11097-69-1	Aroclor-1254	0.0755		mg/kg dry	0.0570	1	**		**	"	te	X
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0570	1	Ħ	н	11	**	4	Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0570	1	н	н	н	11	4	Х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0570	1	"	10	н	-	10	Х
Surrogate	recoveries:											
10386-84-2	4,4-D8-Octafluorobiphenyl (Sr)	113			30-150 %		11	N	11	**	н	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	96			30-150 %		N	*	10	*	N	
2051-24-3	Decachlorobiphenyl (Sr)	105	•		30-150 %		·r		и	н	12	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	93			30-150 %		o	**	et	н	10	
General C	hemistry Parameters											
	% Solids	97.5		<b>%</b> .		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104943	i

Sample Id 81-sc SB25896-	dentification -32			t <u>Project #</u> 5.1000.0000	)	<u>Matrix</u> Concrete		ection Date -Mar-11 11			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12874-11-2	Aroclor-1016 .	BRL		mg/kg dry	0.0615	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104883	X
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0615	1	10	41	11	11	н	X
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0615	1	•	10	н	n	н	X
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0615	1	н	"	**	н ,	4	X
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0615	1	et	Ħ	п	ŧř	4	X
11097-69-1	Aroclor-1254	0.0908		mg/kg dry	0.0615	1	**	4	н	"	*	X
11098-82-5	Aroclor-1260	BRL		mg/kg dry	0.0615	1	11	47	*	•	н	X
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0615	1	н	14		*	*	X
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0615	1	н	. "	11	4	**	х
Surrogate i	recoveries;											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	119			30-150 %		91	q	н	•	u	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	96			30-150 %		er	11	Ħ	"	u	
2051-24-3	Decachlorobiphenyl (Sr)	102			30-150 %		н	n	**	н	u	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	78			30-150 %	•	n	н	Ħ	ч	**	
General C	hemistry Parameters											
	% Solids	97.7		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104943	

Sample Ic 82-sc SB25896-	-33			<u>t Project #</u> 5.1000.0000	)	<u>Matrix</u> Concret		ection Date -Mar-11 11			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	inated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0607	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104885	Х
11104-28-2	Arocior-1221	BRL		mg/kg dry	0.0607	1	n	**	a	•	н	Х
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0607	1	16	#	Ħ	н	н	Х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0607	1	м	10	#	•	4	Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0607	1	н	и	н	π	#	Х
11097-69-1	Aroclor-1254	BRL		mg/kg dry	0.0607	1	•	"	**	*	10	Х
11096-82-5	Arocior-1260	BRL		mg/kg dry	0.0607	1	н	н	16	н	10	Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0607	1	**	*			•	X
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0607	1	er er	*1	11	-	14	X
Surrogate :	recoveries;										***************************************	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	112			30-150 %		μ	*	н	н	n	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	85			30-150 %		P	#		•	н	
2051-24-3	Decachlorobiphenyl (Sr)	108	•		30-150 %		n	*	н	н	69	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	118			30-150 %		н	n	H	•	н	
General C	hemistry Parameters											
	% Solids	97.7		%		. 1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104943	•

	lentification .		Clien	ıt Project #		Matrix	Colle	ection Date	/Time	Re	ceived	
83-sc SB25896-	-34		18112	5.1000.000	)	Concrete	e 18	-Mar-11 11	1:50	21-	Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C								7			
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0557	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104885	Х
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0557	1		н	#	**	*	Х
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0557	1	•	**	le .	11	**	Х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0557	1	Ħ	•	н	Ħ	и	Х
12672-29-6	Arodor-1248	BRL		mg/kg dry	0.0557	.1	п		н	n	19	Х
11097-69-1	Arocior-1254	0.0868		mg/kg dry	0.0557	1	**	10	н	н	н	Х
11096-82-5	Arocior-1260	BRL		mg/kg dry	0.0557	1	11	н	**	4	"	Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0557	1	н	н	11	*	a	Х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0557	1	н	n	•	**	**	х
Surrogate	recoveries;											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	106			30-150 %		*	10	"	**	**	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	82			30-150 %		н	49	н	н	И	
2051-24-3	Decachlorobiphenyl (Sr)	89			30-150 %		19	N	"	M	H	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	77			30-150 %		10	н	**	**	н	
General C	hemistry Parameters											
	% Solids	97.4		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104943	,

84-sc SB25896-	entification 35		***************************************	<u>t Project #</u> .1000.000(	)	<u>Matrix</u> Concrete		ection Date -Mar-11 11			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0598	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104885	Х
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0598	1	н	**	11	н	u	Х
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0598	1	•	n	10	*	•	X
53469-21-9	Aroclor-1242	BRL	*	mg/kg dry	0.0598	1	•	н		н	•	X
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0598	1	41	н	H	•	IF	Х
11097-69-1	Aroclor-1254	BRL		mg/kg dry	0,0598	1	10	**	н	•	14	Х
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0598	1	н	æ	u	45	H	X
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0598	1	**	11	**	н	ы	Х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0598	1	н	N	**	u	#1	X
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	122			30-150 %		11	н	н	"	11	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	93			30-150 %		Ħ	**	п	. "	"	
2051-24-3	Decachlorobiphenyl (Sr)	107			30-150 %			•	•	#	n	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	98			30-150 %		н	n	**	n	н	•
General C	hemistry Parameters											
	% Solids	97.7		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104943	

Sample Id 85-sc SB25896-	entification 36			<u>t Project #</u> 5.1000.000	o	<u>Matrix</u> Concrete		ection Date -Mar-11 12		-	ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											,
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0631	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104885	Х
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0631	1	**	. "	` a	*	**	Х
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0631	1	11	a	10	**	н	X
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0631	1	N	**				Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0631	1	н	н	n		R	Х
11097-69-1	Aroclor-1254	0.484		mg/kg dry	0.0631	1	Ħ	н	**	н	н	Х
11096-82-5	Arodor-1260	BRL		mg/kg dry	0.0631	1	44	tr	11	, п	14	Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0631	1	11	n	19	11	н	Х
11100-14-4	Aroclar-1268	BRL		mg/kg dry	0.0631	1	14	**	n		н	Х
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	118		-	30-150 %		•	H	•	н	я	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	95			30-150 %		н	•	er	н	10	
2051-24-3	Decachlorobiphenyl (Sr)	101			30-150 %		**	**	te	"		
2051-24-3	Decachlorobiphenyl (Sr) [2C]	93			30-150 %		IF	11	н	Ħ	н	
General C	hemistry Parameters											
	% Solids	98.3		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104943	

Sample Id 86-sc SB25896-	lentification			<u>t Project #</u> 5.1000.0000		<u>Matrix</u> Concrete		ection Date -Mar-11 12			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert
Semivolati	ile Organic Compounds by GC											
·	nated Biphenvis by SW846 8082 by method SW846 3540C								,			
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0596	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104885	×
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0596	1	ч	•	**	**	*	X
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0596	1	44	H	н	•	•	X
53459-21-0	Aroclor-1242	BRL		mg/kg dry	0.0596	1		"	et .	N	10	X
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0596	1	•	11	10	**	н	Х
11097-69-1	Aroclar-1254	0.553		mg/kg dry	0.0596	1	#	u	19	10	**	Х
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0596	1	H	п	н	u		х
37324-23-5	Aroclar-1262	BRL		mg/kg dry	0.0596	1	<b>H</b>	•	41	н	н	х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0596	1	**	n	16	•	"	×
Surrogate .	recoveries:						***************************************					
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	83	•		30-150 %		14	u	•	19		
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	66			30-150 %		н	ŧ	#I	а	u	
2051-24-3	Decachlorobiphenyl (Sr)	72			30- <b>15</b> 0 %		# <sup>*</sup>	u	н		**	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	62			30-150 %		i+	••	rı	11	w	
General C	hemistry Parameters											

% Solids

98.2

SM2540 G Mod. 22-Mar-11 22-Mar-11 GMA 1104943

Sample Id 87-sc SB25896-	dentification 38			<u>: Project #</u> .1000.0000	)	<u>Matrix</u> Concrete	-	ction Date Mar-11 12			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert
Semivolati	ile Organic Compounds by GC											
	nated Biphenvis by SW846 8082 by method SW846 3540C					4						
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0610	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104885	X
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0610	1		н	**	•	**	X
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0610	1	ч	*1	н	н	н	Х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0610	1	Ħ	•	**	•	a	X
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0610	1	и		w	10	н	X
11097-69-1	Aroclor-1254	BRL		mg/kg dry	0.0610	1	16	n	н	н		Х
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0610	1	н	4	••	•	н	X
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0610	1	н	**	•	4	н	Х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0,0610	1	π	**	u	**	*1	X
Surrogate	recoveries:										•	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	129			30-150 %		16	н	ti .	н	и	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	99			30-150 %		н	et	Ħ	ri	н	
2051-24-3	Decachlorobiphenyl (Sr)	110			30-150 %		. "	**		**	•	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	98			30-150 %		**	IJ	н		п	
General C	hemistry Parameters											
	% Solids	97.3		%		1	SM2540 G Mod.	22-Маг-11	22-Mar-11	GMA	1104943	

<u>Sample Id</u> <b>88-sc</b> SB25896-	entification 39			t Project # 5.1000.000	)	Matrix Concrete		ction Date Mar-11 12			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Arodor-1016	BRL		mg/kg dry	0.0535	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104885	X
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0535	1	н	н	н	н	н	X
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0535	1	и	**	11	*	**	Х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0535	1	и	H	М	14		Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0535	1	41	**	14	н	н	Х
11097-69-1	Aroclor-1254	0.639		mg/kg dry	0.0535	1	18	n	н	e	Ħ	Х
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0535	1	*1	n	•		10	Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0535	1	19	Ħ	**	н	N	Х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0535	1	"		Ħ	**	"	X
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	123			30-150 %		"	п	•	н	н	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	95			30-150 %		10	tt.		"	"	
2051-24-3	Decachlorobiphenyl (Sr)	105			30-150 %		н	"	**	19	17	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	95			30-150 %		**	н	*	н	19	
General C	hemistry Parameters										•	
	% Solids	98.6		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104943	3

Sample Id 89-sc SB25896-	entification 40			<u>: Project #</u> .1000.0000	)	Matrix Concrete		ction Date Mar-11 12			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0623	1	SW846 8082A	21-Mar-11	24-Mar-11	ŞM	1104885	Х
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0623	1	•	19	п	u	"	Х
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0623	1	H	н	*	41	m	X
53469-21-9	Arodor-1242	BRL		mg/kg dry	0,0623	1	*		**	ď	n	X
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0623	1	**	•	•	n	**	X
11097-69-1	Aroclor-1254	BRL		mg/kg dry	0.0623	1	**	•		н	н	X
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0623	1	10				•	Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0623	1	н	u		tf	**	X
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0623	1	н	**	11	H	n	X
Surrogate i	ecoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	126			30-150 %		4	11	*	•	**	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	98			30-150 %		19	N	Ħ	#	**	
2051-24-3	Decachlorobiphenyl (Sr)	108			30-150 %		v	•	**	•	**	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	92			30-150 %		и	er er	**	ıŧ	10	
General C	hemistry Parameters											
	% Solids	98.1		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104943	ı

Sample Id 90-sc SB25896-	dentification			<u>t Project #</u> 5.1000.000	)	<u>Matrix</u> Concrete		ection Date -Mar-11 12			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenvis by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0668	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104885	Х
11104-28-2	Arodor-1221	BRL		mg/kg dry	0.0668	1	н .	•	11	ч	H	Х
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0668	1	71		**	**	н	Х
53469-21-9	Aroclor-1242	BRL	•	mg/kg dry	0.0668	1	**	10	41	**	t#	Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0668	1	91	ıt	и	*1	14	Х
11097-69-1	Aroclor-1254	BRL		mg/kg dry	0.0668	1	41	N	11	•	Ħ	X
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0668	1	u	и	n		п	Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0668	1	47		н		н	Х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0668	1	11	н	, m		'n	х
Surrogate i	recoveries:											~
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	119			30-150 %		н	n	n		n	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	94			30-150 %		rt	н	**		ч	
2051-24-3	Decachlorobiphenyl (Sr)	103			30-150 %		18	**	tr	н		
2051-24-3	Decachlorobiphenyl (Sr) [2C]	88			30-150 %		17	н		n		
General C	hemistry Parameters											
	% Solids	97.3		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104943	

Sample Io 91-sc SB25896	dentification -42			nt Project # 5.1000.000	0	<u>Matrix</u> Concret		ection Date -Mar-11 13			<u>ceived</u> Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolat	ile Organic Compounds by GC											
	inated Biphenyls by SW846 8082 by method SW846 3540C			,								
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0618	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104885	x
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0618	1	**	*		н	, "	x
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0618	1	19	•	и	н	н	х
53469-21-9	Aroclar-1242	BRL		mg/kg dry	0.0618	1	12	•	н	н	я	x
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0618	1	11		*	44	44	х
11097-69-1	Aroclor-1254	BRL		mg/kg dry	0.0618	1	44	u	n	п	111	X
11096-82-5	Aroclar-1260	BRL		mg/kg dry	0.0618	1	17	Ħ	н	н	**	X
37324-23-5	Aroclar-1262	BRL		mg/kg dry	0.0618	1		н	п	10	**	X
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0618	1	र्ग	а	N		**	X
Surrogate i	recoveries:		-	7000			·				<del></del>	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	115			30-150 %		н	н	**		н	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	91			30-150 %		N	"		. н	н	
2051-24-3	Decachlorobipheπyl (Sr)	102			30-150 %		10	ŧr	**	н	16	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	90			30-150 %		4	•	н			
General C	hemistry Parameters											
	% Salids	97.8		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104943	

Sample Id 92-sc SB25896-	dentification -43			<u>t Project #</u> 5.1000.0000	)	<u>Matrix</u> Concrete		ection Date -Mar-11 13			<u>ceived</u> Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC										*	
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0521	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104885	X
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0521	1	**	10	**	17	н	х
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0521	1	78	n	11	10		х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0521	1	**	*	**	10	н	х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0521	1	N	н	n	te .	14	х
11097-69-1	Aroclor-1254	0.332		mg/kg dry	0.0521	1	•	19			•	X
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0521	1	•	н	n	н	н	х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0521	1	n	н :	n		•	X
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0521	1	м	•	H	н	**	X
Surrogate i	recoveries:		111-0-1								******	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	122			30-150 %		n	н		14	н	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	96			30-150 %		н	n	14	н	11	
2051-24-3	Decachlorobiphenyl (Sr)	107			30-150 %		**	**	11	"	49	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	79			30-150 %		n	N	**	**	10	

General Chemistry Parameters
% Solids

97.8

SM2540 G Mod. 22-Mar-11 22-Mar-11 GMA 1104943

Sample Id 93-sc SB25896-	dentification 44			t Project # 5.1000.0000	)	<u>Matrix</u> Concrete		ction Date Mar-11 13		_	ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroctor-1016	BRL		mg/kg dry	0.0618	1	SW846 B0B2A	21-Mar-11	24-Mar-11	SM	1104885	Х
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0618	1	N	"	n	. n		X
11141-16-5	Arodor-1232	BRL		mg/kg dry	0.0618	1	M	н			•	Х
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0618	1	*1	м	••	**	10	X
12672-29-6	Araclor-1248	BRL		mg/kg dry	0.0618	1	*	n	10	н	4	X
11097-69-1	Arador-1254	BRL		mg/kg dry	0,0618	1	10	**	**	•	•	X
11095-82-5	Aroclor-1260	BRL		mg/kg dry	0.0618	1	н	tr.	н	**	**	X
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0618	1	•	н	11	•	11	Х
11100-14-4	Aroclor-1268	BRL .		mg/kg dry	0.0618	1	**	. "	11	10	п	х
Surrogate i	ecoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	118			30-150 %		н	H	Ħ	**	•	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	98			30-150 %		и	н	11	17	••	
2051-24-3	Decachlorobiphenyl (Sr)	112			30-150 %		11	*1	**	**		
2051-24-3	Decachlorobiphenyl (Sr) [2C]	87			30-150 %		n	n	N	'n	н	
General C	hemistry Parameters								3			
	% Solids	97.9		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104943	,

Sample Id 94-sc SB25896-	entification 45			t Project # 5.1000.0000	)	<u>Matrix</u> Concrete	******	ction Date Mar-11 13			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Ceri.
Semivolati	le Organic Compounds by GC											
	nated Biphenyis by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0646	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104885	Х
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0646	1	*1	H	**	*	**	Х
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0646	1	ır	н	n	u		Х
53469-21- <del>9</del>	Aroclor-1242	BRL		mg/kg dry	0.0646	1	íe .	н	*	17	n	Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0646	1	H	Pt	н	и	71	Х
11097-69-1	Aroclor-1254	0.421		mg/kg dry	0.0646	1	•	*	•	"	•	Х
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0646	1	. "	#	11	н	11	X s
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0646	1	**	ħ	TI			Х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0646	1		N		н	17	Х
Surrogate i	ecoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	108			30-150 %		n	н	и	#	12	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	84			30-150 %		17	*1	n	10	n	
2051-24-3	Decachlorobiphenyl (Sr)	97			30-150 %		19	47	•	19	14	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	84			30-150 %		н	**	ut	n	н	
General C	hemistry Parameters											
	% Solids	98.4		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104943	

Sample Id 95-sc SB25896-	<u>lentification</u> -46			<u> Project #</u> .1000.0000	)	<u>Matrix</u> Concrete		ection Date -Mar-11 13			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclar-1016	BRL		mg/kg dry	0.0599	1	SW846 8082A	21-Mar-11	24-Mar-11	SM	1104885	Х
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0599	1	, "	-	19	н	4	Х
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0599	1	, "		н	<b>e</b> r	•	X
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0,0599	1	*	*	*	41	**	Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0599	1	н	N	4	11	Ħ	Х
11097-69-1	Aroclor-1254	0,156		mg/kg dry	0.0599	1	**	н	**	п	н	Х
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0599	1	**	•	**	N	н	Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0599	1	19	wt .	н	н	•	Х
11100-14-4	Arodor-1268	BRL		mg/kg dry	0.0599	1		**	н	**	"	х
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	111			30-150 %		•	10	•	"	**	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	88			30-150 %		et	ti	π	11	w	
2051-24-3	Decachlorobiphenyl (Sr)	101			30-150 %		•	N	er er		10	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	80			30-150 %		**	н	4	я	IE	
General C	hemistry Parameters											
	% Solids	98.4		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104943	

Sample Id 96-sc SB25896-	entification 47			<u>t Project #</u> 5.1000.0000	)	<u>Matrix</u> Concrete		ection Date -Mar-11 13			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0645	1	SW846 8082A	21-Mar-11	25-Mar-11	SM	1104885	X
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0645	1	"	17	**	••	**	Х
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0645	1	4	n	**	9	0	X
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0645	1	я	•		•	н	Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0645	1	в	**	н	*	n	Х
11097-69-1	Aroclor-1254	0.0665		mg/kg dry	0.0645	1	н		u			Х
11096-82-5	Arodor-1260	BRL		mg/kg dry	0.0645	1	**	11	tr	**	10	Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0645	1	44	41	14	н	N	×
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0,0645	1	#	**	н	*	н	х
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	125			30-150 %		н	н	**	v	45	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	99			30-150 %		п		11		12	
2051-24-3	Decachlorobiphenyl (Sr)	106			30-150 %		" .	tr	и	"	н	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	92			30-150 %		. "	10	et	"	**	
General C	hemistry Parameters											
	% Solids	97.6		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104943	ı

Sample Id 97-Soil SB25896-	entification 48			<u>t Project #</u> .1000.0000	)	<u>Matrix</u> Soil		ection Date -Mar-11 13			<u>ceived</u> Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0239	1	SW846 8082A	21-Mar-11	25-Mar-11	SM	1104885	X
11104-28-2	Arodor-1221	BRL		mg/kg dry	0.0239	1	**	н	n	н	**	Х
11141-16-5	Arodor-1232	BRL		mg/kg dry	0.0239	1	#	**	**	*	м	X
53469-21-9	Arodor-1242	BRL		mg/kg dry	0.0239	1	"	4	11	#	*	Х
12672-29-6	Arodor-1248	BRL		mg/kg dry	0.0239	1	н		н		44	Х
11097-69-1	Arodor-1254	1.42		mg/kg dry	0.0239	1	ir	q	er er	н		Х
11096-82-5	Arodor-1260	BRL		mg/kg dry	0.0239	1	н	11	**	•	*	Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0239	1	н	n	н	Ħ	Ħ	Х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0239	1	н	*	н	Ħ	11	Χ
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	101			30-150 %		**	•	17	"	н	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	78			30-150 %		18	н	n	tt	н	
2051-24-3	Decachlorobiphenyl (Sr)	92			30-150 %		н	и	u	11	н	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	79			30-150 %		н	н			*1	
General C	hemistry Parameters											
	% Solids	80.4		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104943	

Sample Id 98-Soil SB25896-	entification 49			<u>t Project #</u> 5.1000.0000	)	<u>Matrix</u> Soil		ction Date Mar-11 13			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0234	1	SW846 8082A	21-Mar-11	25-Mar-11	SM	1104885	Х
11104-26-2	Aroclor-1221	BRL		mg/kg dry	0.0234	1	u.	14	H	10	**	X
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0234	1	н	н	"	н	-"	X
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0234	1	н	**	н	#	н	Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0234	1	**		*	10	#1	X
11097-69-1	Aroclor-1254	0.177		mg/kg dry	0.0234	1	10	н	и	Ħ	19	Х
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0234	1	н	11	н	47	п	Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0234	1	u ·	N	er	н	4	X
11100-14-4	Arodor-1268	BRL		mg/kg dry	0.0234	1	H		н	n	11	×
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	110			30-150 %		11	•	**	,	•	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	86			30-150 %		п	at.	Ħ	•	**	
2051-24-3	Decachlorobiphenyl (Sr)	105			30-150 %		11	и	er er	14	н	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	96			30-150 %		и	**	10	19	Ħ	
General C	hemistry Parameters											
	% Solids	79.1		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104943	j

Sample Io 99-Soil SB25896-	dentification -50			t Project # .1000.0000	)	<u>Matrix</u> Soil		ction Date Mar-11 13			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert
Polychlori	ile Organic Compounds by GC nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0234	1	SW846 8082A	21-Mar-11	25-Mar-11	SM	1104885	X
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0234	1	tr	đ	**	"		X
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0234	1	e	18	н	n	Ħ	X
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0,0234	1	и		**	•	4	X
12672-29-6	Arocior-1248	BRL		mg/kg dry	0.0234	1	41	4	<b>tt</b>	Ħ	Je	X
11097-69-1	Aroclor-1254	2,20		mg/kg dry	0.0234	1	17	u	n	n		X
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0234	1	17	¥f	n	"	m	X
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0234	1	ħ	**	•	n	**	X
11100-14-4	Arocior-1268	BRL		mg/kg dry	0.0234	1	7		11		"	Х
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	138			30-150 %		1¢	wi	H	и	11	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	90			30-150 %		и	<b>t</b> r	и	"	**	
2051-24-3	Decachlorobiphenyl (Sr)	109			30-150 %		н	"	**	*	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	98			30-150 %		n	н	40	*1	at	
General C	hemistry Parameters											
	% Solids	82.2		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	,1104943	1

Sample Id 100-Soil SB25896-	-51			nt Project # 5.1000.0000	)	<u>Matrix</u> Soil		ection Date -Mar-11 13			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenvis by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0227	1	SW846 8082A	21-Mar-11	25-Mar-11	SM	1104885	X
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.0227	1	11			н	,,	X
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0227	1	n	n	*1	Ħ	R	X
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.0227	1		н	47	**	**	Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0227	1	*	н	11	"	**	х
11097-69-1	Aroclor-1254	0.243		mg/kg dry	0.0227	1	"	н	•	"	•	х
11096-82-5	Arodor-1260	BRL		mg/kg dry	0.0227	1	•	н	11	11	•	х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0227	1	н	n	10	**	**	х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0227	1	п	41	(4	17	11	x
Surrogate i	ecoveries:		.,									
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	117			30-150 %		n	*	н	17	10	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	83			30-150 %		ri	ŧı	u	10	41	
2051-24-3	Decachlorobiphenyl (Sr)	108			30-150 %		"	**	n	**	10	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	93			30-150 %		•	ar	и	18	16	
General C	hemistry Parameters											
	% Solids	84.0		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104962	

Sample Id 101-sc SB25896-	lentification -52			<u>t Project #</u> 5.1000.0000	)	<u>Matrix</u> Asphalt		ction Date Mar-11 13			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert
Semivolati	le Organic Compounds by GC							`.				
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.207	1	SW846 8082A	21-Mar-11	25-Mar-11	SM	1104885	X
11104-28-2	Aroclor-1221	BRL		mg/kg dry	0.207	1		10	44	u	ч	X
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.207	1	а	и	a	Ħ	#	X
53469-21-9	Aroclor-1242	BRL		mg/kg dry	0.207	1	•	н		•		Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.207	1	45	ч	19	н	n	Х
11097-69-1	Aroclor-1254	0.992		mg/kg dry	0.207	1	H	41	н	н	н	Х
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.207	1	п	17	n	"	н	Х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.207	1	n	w	**	•	и	X
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.207	1	<b>.</b>	"	41	u	"	X
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	116			30-150 %		**	*1	4	**	1\$	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	90			30-150 %		10	Ħ	48	•	15	
2051-24-3	Decachlorobiphenyl (Sr)	106			30-150 %		te	**	14			
2051-24-3	Decachlorobiphenyl (Sr) [2C]	102			30-150 %		н	11	N	н	19	
General C	hemistry Parameters											
	% Solids	97.3		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104962	

Sample Io 102-sc SB25896	dentification -53			<u>st Project #</u> 5.1000.0000	)	<u>Matrix</u> Asphalt	-	ection Date -Mar-11 14			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Unîts	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0202	1	SW846 8082A	21-Mar-11	24-Mar-11	IMR	1104847	х
11104-28-2	Aroclar-1221	BRL		mg/kg dry	0.0202	1	. <del>ग</del>	tr	q		**	х
11141-16-5	Arocior-1232	BRL	•	mg/kg dry	0.0202	1	*	ŗ	4	11	**	х
53469-21-9	Arocior-1242	BRL		mg/kg dry	0.0202	1	н	ŧŧ	11		R	Х
12672-29 <del>-6</del>	Aroclor-1248	BRL		mg/kg dry	0.0202	1	R		**		. *	х
11097-69-1	Aroclor-1254	0.499		mg/kg dry	0.0202	1	16	и	•	н	n	х
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0202	1	t#	и	n	н		х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0202	1	n	п	•	•	10	х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0202	1		н	н	н	п	х
Surrogate i	recoveries;							*****				
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	73			30-150 %		10	19		п		
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	83			30-150 %		**	п	•	•		
2051-24-3	Decachlorobiphenyl (Sr)	56			30-150 %		R	11	u	н	10	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	55			30-150 %		10	**	н	п	10	
General C	hemistry Parameters											
	% Solids	98.3		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104962	

Sample Ic 103-sc SB25896-	-54			t Project # 5.1000.000	0	<u>Matrix</u> Asphalt		ection Date -Mar-11 14			<u>ceived</u> Mar-I I	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		mg/kg dry	0.0200	1	SW846 8082A	21-Mar-11	24-Mar-11	IMR	1104847	Х
11104-28-2	Aroclor-1221	BRL .		mg/kg dry	0.0200	1	41	н	10	п	10	Х
11141-16-5	Aroclor-1232	BRL		mg/kg dry	0.0200	1	#	4	44	**	'n	Х
53469-21 <del>-9</del>	Aroclor-1242	BRL		mg/kg dry	0.0200	1	*1	•	10	4		Х
12672-29-6	Aroclor-1248	BRL		mg/kg dry	0.0200	1	u	Ħ		*		х
11097-69-1	Aroclor-1254	0.171		mg/kg dry	0.0200	1	**	п		D	10	х
11096-82-5	Aroclor-1260	BRL		mg/kg dry	0.0200	1	**	M	н		•	х
37324-23-5	Aroclor-1262	BRL		mg/kg dry	0.0200	1	•	**	м		14	х
11100-14-4	Aroclor-1268	BRL		mg/kg dry	0.0200	1	Rt.	н	н	н	н	Х
Surrogate i	recoveries:					· ···	·					
10385-84-2	4,4-DB-Octafluorobiphenyl (Sr)	67			30-150 %		97	н	н	11	10	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	72			30-150 %		**	*	N	**	**	
2051-24-3	Decachlorobiphenyl (Sr)	55			30-150 %		н	н	n	ıţ	lr .	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	46			30-150 %		н	N	14	47	•	
General C	hemistry Parameters											
	% Solids	99,3		%		1	SM2540 G Mod.	22-Mar-11	22-Mar-11	GMA	1104962	

nalyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD .	RPD Limi
atch 1104847 - SW846 3549C										
Blank (1104847-BLK1)					Pre	pared: 21-	Mar-11 An	alyzed: 22-M	ar-11	
Arodor-1016	BRL		mg/kg wet	0.0200						
Arodor-1016 [2C]	BRL		mg/kg wet	0.0200						
Aroclor-1221	BRL		mg/kg wet	0.0200						
Arodor-1221 [2C]	BRL		mg/kg wet	0.0200						
Aroclor-1232	BRL		mg/kg wet	0.0200						
Aroclor-1232 [2C]	BRL		mg/kg wet	0.0200						
Arodor-1242	BRL		mg/kg wet	0.0200						
Arodor-1242 [2C]	BRL		mg/kg wet	0.0200						•
Arodor-1248	BRL		mg/kg wet	0.0200						
Arodor-1248 [2C]	BRL		mg/kg wet	0.0200						
Aroclor-1254	BRL		mg/kg wet	0.0200						
Arodor-1254 [2C]	BRL		mg/kg wet	0.0200						
Aroclor-1260	BRL		mg/kg wet	0.0200				12		
Aroclor-1260 [2C]	BRL		mg/kg wet	0.0200						
Aroclor-1262	BRL		mg/kg wet	0.0200	4					
Arodor-1262 [2C]	BRL		mg/kg wet	0.0200						
Aroclor-1268	BRL		mg/kg wet	0.0200						
Aroclor-1268 [2C]	BRL		mg/kg wet	0,0200						
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	0.0177		mg/kg wet		0.0200		88	30-150		·
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.0215		mg/kg wet		0.0200		108 *	30-150		
Surrogate: Decachlorobiphenyl (Sr)	0.0241		mg/kg wet		0.0200		121	30-150		
Surrogate: Decachiorobiphenyl (Sr) [2C]	0.0246		mg/kg wet		0.0200		123	30-150		
LCS (1104847-BS1)	*******		g///g tree			nnamel 01		alvzed: 23-N		
Arodor-1016	0.204		malka wat	0.0200	0.250	spated: Z1-			1ar-11	
Araclor-1016 [2C]	0.232		mg/kg wet				82	50-140		
Aroclor-1260	0.213		mg/kg wet	0.0200	0,250		93	50-140		
Aroclor-1260 [2C]	0.218		mg/kg wet mg/kg wet	0.0200 0.0200	0.250 0.250		85 87	50-140		
				0.0200			~~~~	50-140		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	0.0174		mg/kg wet		0.0200		87	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.0201		mg/kg wet		0.0200		101	30-150		
Surrogate: Decachlorobiphenyl (Sr)	0.0236		mg/kg wet		0.0200		118	30-150		
Surrogate: Decachiorobiphenyl (Sr) [2C]	0.0276		mg/kg wet		0.0200		138	30-150		
LCS Dup (1104847-B\$D1)					<u>Pn</u>	epared: 21-	Mar-11 An	alyzed: 23-N	<u>lar-11</u>	
Aroclor-1016	0.224		mg/kg wet	0.0200	0.250	,	89	50-140	9	30
Aroclor-1016 [2C]	0.243		mg/kg wet	0.0200	0.250		97	50-140	5	30
Aroclor-1260	0.228		mg/kg wet	0.0200	0.250		91	50-140	7	30
Aroclor-1260 [2C]	0.205		mg/kg wet	0.0200	0.250		82	50-140	6	30
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	0.0189		mg/kg wet		0.0200		94	<b>30</b> -150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.0203		mg/kg wet		0.0200		102	30-150		
Surrogate: Decachlorobiphenyl (Sr)	0.0259		mg/kg wet		0.0200		130	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	0.0258		mg/kg wet		0.0200		129	30-150		
atch 1104882 - SW846 3540C										
Blank (1104882-BLK1)					Pre	epared: 21	-Mar-11 An	alyzed: 23-N	iar-11_	
Arodor-1016	BRL		mg/kg wet	0.0200						
Aroclor-1016 [2C]	BRL		mg/kg wet	0.0200						
Aroclor-1221	BRL		mg/kg wet	0.0200						
Arodor-1221 [2C]	BRL		mg/kg wet	0.0200						
Arodor-1232	BRL		mg/kg wet	0.0200						
Aroclor-1232 [2C]	BRL		mg/kg wet	0.0200						
Aroclor-1242	BRL		mg/kg wet	0.0200						
Aroclor-1242 [2C]	BRL		mg/kg wet	0.0200						

nalyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
atch 1104882 - SW846 3540C										
Blank (1104882-BLK1)					<u>Pre</u>	epared: 21-	Mar-11 An	alvzed: 23-N	lar-11	
Aroclor-1248	BRL		mg/kg wet	0.0200						
Aroclor-1248 [2C]	BRL		mg/kg wet	0.0200						
Aroclor-1254	BRL		mg/kg wet	0.0200						
Aroclor-1254 [2C]	BRL		mg/kg wet	0.0200						
Aroclor-1260	BRL		mg/kg wet	0.0200						
Aroclor-1260 [2C]	BRL		mg/kg wet	0.0200						
Aroclor-1262	BRL		mg/kg wet	0.0200						
Aroclor-1262 [2C]	BRL		mg/kg wet	0.0200	•					
Aroclor-1268	BRL		mg/kg wet	0.0200						
Aroclor-1268 [2C]	BRL		mg/kg wet	0.0200						
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	0.0194		mg/kg wet		0.0200		97	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.0218		mg/kg wet		0.0200		109	30-150		
Surrogate: Decachlorobiphenyl (Sr)	0.0255		mg/kg wet		0.0200		128	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	0.0211		mg/kg wet		0.0200		106	30-150		
LCS (1104882-BS1)					Pn	epared: 21-	Mar-11 An	alyzed: 23-N	Aar-11	
Aroclor-1016	0.217		mg/kg wet	0.0200	0,250	**************************************	87	50-140		
Aroclor-1016 [2C]	0.228		mg/kg wet	0.0200	0.250		91	50-140		
Aroclor-1260	0,221		mg/kg wet	0.0200	0.250		89	50-140		
Aroclor-1260 [2C]	0.210		mg/kg wet	0.0200	0.250		84	50-140		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	0.0218		mg/kg wet		0.0200		109	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.0228		mg/kg wet		0.0200		114	30-150 30-150		
Surrogate: Decachlorobiphenyl (Sr)	0.0248		mg/kg wet		0.0200		124	30-150 30-150		
Surrogate: Decachiorobiphenyl (Sr) [2C]	0.0236		mg/kg wet		0.0200		118	30-150		
LCS Dup (1104882-BSD1)			g.ittg if ot			anarad: 21		alyzed: 23-N	fan 11	
Aroclor-1016	0,234		mg/kg wet	0.0200	0.250	cpared. 21-	94	50-140		20
Aroclor-1016 [2C]	0.231		mg/kg wet	0.0200	0.250		93	50-140	8	30
Aroclor-1260	0.216		mg/kg wet	0.0200	0.250		86	50-140	1 3	30 30
Aroclor-1260 [2C]	0.224		mg/kg wet	0.0200	0.250		90	50-140 50-140	6	30
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	0.0226		mg/kg wet		0.0200		113	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.0233		mg/kg wet		0.0200		117	30-150		
Surrogate: Decachlorobiphenyl (Sr)	0.0259		mg/kg wet		0.0200		130	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	0.0240		mg/kg wet		0.0200		120	30-150		
atch 1104883 - SW846 3540C							.25	55 156		
Blank (1104883-BLK1)					De		14	-td. 64 t		
Aroclor-1016	BRL		malka wat	0.0200	Pit	epareu, z I-	mai-11 An	alyzed: 24-N	nar-11	
Aroclor-1016 [2C]	BRL		mg/kg wet	0.0200						
Aroclor-1221	BRL		mg/kg wet							
Aroclor-1221 [2C]	BRL		mg/kg wet	0.0200						
Aroclor-1232	BRL		mg/kg wet mg/kg wet	0.0200 0.0200						
Aroclor-1232 [2C]	BRL		mg/kg wet	0.0200						
Aroclor-1242	BRL			0.0200						
Aroclor-1242 [2C]	BRL		mg/kg wet	0.0200						
Aroclor-1248	BRL		mg/kg wet							
Aroclor-1248 [2C]	BRL		mg/kg wet	0.0200						
Aroctor-1254	BRL		mg/kg wet	0.0200						
Aroclor-1254 [2C]	BRL		mg/kg wet	0.0200						
, 40401-1207 [20]	BRL		mg/kg wet	0.0200						
Amelor-1260	RH.		mg/kg wet	0.0200						
Aroclor-1260										
Aroclor-1260 Aroclor-1260 [2C] Aroclor-1262	BRL BRL		mg/kg wet mg/kg wet	0.0200 0.0200						

nalyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limi
tch 1104883 - SW846 3540C										
Blank (1104883-BLK1)					Pre	epared: 21-	Mar-11 An	alyzed: 24-M	ar-11	
Aroclor-1268	BRL		mg/kg wet	0.0200						
Aroclor-1268 [2C]	BRL		mg/kg wet	0.0200						
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	0.0264		mg/kg wet		0.0200		132	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.0199		mg/kg wet		0.0200		100	30-150		
Surrogate: Decachlorobiphenyl (Sr)	0.0228		mg/kg wet		0.0200		114	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	0.0187		mg/kg wet		0.0200		94	30-150	*,	
LCS (1104883-BS1)					Pro	pared: 21-	Mar-11 Ar	nalyzed: 24-M	lar-11	
Aroclor-1016	0.227		mg/kg wet	0.0200	0.250		91	50-140		
Aroclor-1016 [2C]	0.225		mg/kg wet	0.0200	0.250		90	50-140		
Aroclor-1260	0.201		mg/kg wet	0.0200	0.250		80	50-140		
Aroclor-1260 [2C]	0.237		mg/kg wet	0.0200	0,250		95	50-140		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	0.0208		mg/kg wet		0.0200		104	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.0196		mg/kg wet		0.0200		98	30-150		
Surrogate: Decachlorobiphenyi (Sr)	0.0201		mg/kg wet		0.0200		101	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	0.0175		mg/kg wet		0.0200		88	30-150		
LCS Dup (1104883-BSD1)	0.07.70		mgmg not			anarad: 21		nalyzed: 24-M	lar 11	
Aroclor-1016	0.190		mg/kg wet	0.0200	0.250	spared. ZI-	76	50-140	18	30
Aroclor-1016 [2C]	0.138		mg/kg wet	0.0200	0.250		87	50-140	4	30 30
Aroclor-1260	0.191		mg/kg wet	0.0200	0.250		76	50-140	5	30
Aroclor-1260 [2C]	0.221		mg/kg wet	0.0200	0.250		70 88	50-140	7	30
				0.0200						
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.0174 0.0195		mg/kg wet		0.0200		87	30-150		
Surrogate: Decachiorobiphenyl (Sr)	0.0195		mg/kg wet		0.0200		98	30-150		
Surrogate: Decachiorobiphenyl (Sr) [2C]	0.0164		mg/kg wet mg/kg wet		0.0200 0.0200		83	30-150		
	0.0704			05000 40			82	30-150		
<u>Duplicate (1104883-DUP1)</u> Aroclor-1016	DDI		Source: SB		Ph		-Mar-11 Ar	nalyzed: 24-M	<u>lar-11</u>	
Arodor-1016 [2C]	BRL BRL		mg/kg dry	0.0245		BRL				40
Arodor-1816 (20) Arodor-1221			mg/kg dry	0.0245		BRL				40
Arodor-1221 [2C]	BRL		mg/kg dry	0.0245		BRL				40
Arodor-1221 [20] Arodor-1232	BRL		mg/kg dry	0.0245		BRL				40
	BRL		mg/kg dry	0.0245		BRL				40
Aroclor-1232 [2C] Aroclor-1242	BRL		mg/kg dry	0.0245		BRL				40
	BRL BRL		mg/kg dry	0.0245		BRL				40
Aroclor 1248			mg/kg dry	0.0245		BRL			•	40
Aroclor-1248 Aroclor-1248 [2C]	BRL		mg/kg dry	0.0245		BRL				40
Arocior-1246 [20] Arocior-1254	BRL		mg/kg dry	0.0245		BRL			0-	40
Arocior-1254 Arocior-1254 [2C]	2.66		mg/kg dry	0.0245		2.14			22	40
Arodor-1260	2.68		mg/kg dry	0.0245		2.22			18	40
Arodor-1260 [2C]	BRL		mg/kg dry	0.0245		BRL				40
Arodor-1260 [20] Arodor-1262	BRL		mg/kg dry	0.0245		BRL				40
	BRL		mg/kg dry	0.0245		BRL				40
Aroclor-1262 [2C] Aroclor-1268	BRL		mg/kg dry	0.0245		BRL				40
Aroclor-1268 Aroclor-1268 [2C]	BRL		mg/kg dry	0.0245		BRL				40
	BRL		mg/kg dry	0.0245		BRL				40
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	0.0350		mg/kg dry		0.0245		143	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.0244		mg/kg dry		0.0245		99	30-150		
Surrogate: Decachlorobiphenyl (Sr)	0.0290		mg/kg dry		0.0245		118	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	0.0268		mg/kg dry		0.0245		109	30-150		
Matrix Spike (1104883-MS1)			Source: SB					nalyzed: 24-N	<u>lar-11</u>	
Aroclor-1016	0.242		mg/kg dry	0.0237	0.296	BRL	82	40-135		
Aroclor-1016 [2C]	0.247		mg/kg dry	0.0237	0,296	BRL	83	40-135		

nalyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limi
atch 1104883 - SW846 3540C										
Matrix Spike (1104883-MS1)			Source: SB	<u> 25896-13</u>	<u>Pre</u>	epared: 21-	Mar-11 Ar	nalyzed: 24-M	lar-11	
Arodor-1260	0.534	QM2	mg/kg dry	0.0237	0.296	BRL	180	40-135		
Arodor-1260 [2C]	0.546	QM2	mg/kg dry	0.0237	0.296	BRL	184	40-135		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	0.0249		mg/kg dry		0.0237		105	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.0218		mg/kg dry		0.0237		92	30-150		
Surrogate: Decachlorobiphenyl (Sr)	0.0292		mg/kg dry		0.0237		123	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	0.0285		mg/kg dry		0.0237		120	30-150		
Matrix Spike Dup (1104883-MSD1)			Source: SB	25896-13	<u>Pre</u>	epared: 21-	Mar-11 A	nalyzed: 24-M	lar-11	
Aroclor-1016	0.277		mg/kg dry	0.0242	0,302	BRL	92	40-135	11	30
Aroclor-1016 [2C]	0.286		mg/kg dry	0.0242	0.302	BRL	95	40-135	13	30
Aroclor-1260	0.616	QM2	mg/kg dry	0.0242	0.302	BRL	204	40-135	13	30
Aroclor-1260 [2C]	0.694	QM2	mg/kg dry	0.0242	0.302	BRL	230	40-135	22	30
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	0.0296		mg/kg dry		0.0242		123	30-150		******
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.0254		mg/kg dry		0.0242		105	30-150		
Surrogate: Decachlorobiphenyl (Sr)	0.027 <b>3</b>		mg/kg dry		0.0242		113	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	0.0220		mg/kg dry		0.0242		91	30-150		
atch 1104885 - SW846 3540C			-							
Blank (1104885-BLK1)					Pre	enared: 21-	Mar-11 A	nalyzed; 24-N	lar_11	
Aroclor-1016	BRL		mg/kg wet	0.0200	-13		77.0	ildişedd, 24 ji	IMI-TT.	
Arodor-1016 [2C]	BRL		mg/kg wet	0.0200						
Aroclor-1221	BRL		mg/kg wet	0.0200						
Aroclor-1221 [2C]	BRL		mg/kg wet	0.0200						
Arador-1232	BRL		mg/kg wet	0.0200						
Aroclor-1232 [2C]	BRL		mg/kg wet	0.0200						,
Aroclor-1242	BRL		mg/kg wet	0.0200						
Aroclor-1242 [2C]	BRL		mg/kg wet	0.0200			•			
Aroclor-1248	BRL		mg/kg wet	0.0200						
Aroclor-1248 [2C]	BRL		mg/kg wet	0.0200						
Aroclor-1254	BRL		mg/kg wet	0.0200						
Aroclor-1254 [2C]	BRL		mg/kg wet	0.0200						
Aroclor-1260	BRL		mg/kg wet	0.0200						
Aroclor-1260 [2C]	BRL		mg/kg wet	0.0200						
Aroclor-1262	BRL		mg/kg wet	0.0200						
Arodor-1262 [2C]	BRL		mg/kg wet	0.0200						
Aroclor-1268	BRL		mg/kg wet	0.0200						
Arodor-1268 [2C]	BRL		mg/kg wet	0.0200						
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	0,0226		mg/kg wet		0.0200		113	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.0184		mg/kg wet		0.0200		92	30-150		
Surrogate: Decachlorobiphenyl (Sr)	0.0203		mg/kg wet		0.0200		102	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	0.0178		mg/kg wet		0.0200		89	30-150		
LCS (1104885-BS1)			- <del>-</del>			epared: 21-		nalyzed: 24-N	lar-11	
Aroclor-1016	0.225		mg/kg wet	0.0200	0.250	<u> </u>	90	50-140	·	
Aroclor-1016 [2C]	0.206		mg/kg wet	0.0200	0.250		82	50-140		
Aroclor-1260	0.210		mg/kg wet	0.0200	0.250		84	50-140		•
Aroclor-1260 [2C]	0.228		mg/kg wet	0.0200	0.250		91	50-140		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	0.0203									
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.0203		mg/kg wet		0.0200		102 86	30-150 30-150		
Surrogate: 0-2016/10/06/06/06/06/06/06/06/06/06/06/06/06/06	0.0173		mg/kg wet		0.0200		86 105	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	0.025		mg/kg wet mg/kg wet		0.0200 0.0200		105 77	30-150 20-150		
LCS Dup (1104885-BSD1)	V.0107		myrky wet					30-150	1 4 *	
					Pre	-pared: 21-	mar-11 Aı	nalyzed: 24-N	ıar-11	

nalyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPE Limi
itch 1104885 - SW846 3540C								.,,		
LCS Dup (1104885-BSD1)					Pre	pared: 21-	Mar-11 An	alyzed: 24-N	Mar-11	
Aroclor-1016 [2C]	0.211		mg/kg wet	0.0200	0.250		84	50-140	2	30
Aroclor-1260	0.217		mg/kg wet	0.0200	0.250		87	50-140	4	30
Aroclor-1260 [2C]	0.227		mg/kg wet	0.0200	0.250		91	50-140	0.4	30
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	0.0205		mg/kg wet		0.0200		103	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.0174		mg/kg wet		0.0200		87	30-150		
Surrogate: Decachlorobiphenyl (Sr)	0.0218	•	mg/kg wet		0.0200		109	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	0.0165		mg/kg wet		0.0200		82	30-150		
Duplicate (1104885-DUP1)			Source: SB	<u> 25896-33</u>	Pre	pared: 21-	Mar-11 An	alyzed: 24-N	<u> 1ar-11</u>	
Aroclor-1016	BRL		mg/kg dry	0.0536		BRL				40
Arodor-1016 [2C]	BRL		mg/kg dry	0.0536		BRL				40
Aroclor-1221	BRL		mg/kg dry	0.0536		BRL				40
Aroclor-1221 [2C]	BRL		mg/kg dry	0.0536		BRL				40
Aroclor-1232	BRL		mg/kg dry	0.0536		BRL				40
Arodor-1232 [2C]	BRL		mg/kg dry	0.0536		BRL				40
Aroclor-1242	BRL		mg/kg dry	0.0536		BRL				40
Arodor-1242 [2C]	BRL		mg/kg dry	0.0536		BRL				40
Aroclor-1248	BRL		mg/kg dry	0.0536		BRL				40
Aroclor-1248 [2C]	BRL		mg/kg dry	0.0536		BRL				40
Aroclor-1254	BRL		mg/kg dry	0.0536		0.0422				40
Aroclor-1254 [2C]	0.0263	j	mg/kg dry	0.0536		0.0367			33	40
Aroclor-1260	BRL		mg/kg dry	0.0536		BRL				40
Arador-1260 [2C]	BRL		mg/kg dry	0.0536		BRL				40
Aroclor-1262	BRL		mg/kg dry	0.0536		BRL				40
Aroclor-1262 [2C]	BRL		mg/kg dry	0.0536		BRL				40
Arocior-1268	BRL		mg/kg dry	0.0536		BRL				40
Aroclor-1268 [2C]	BRL		mg/kg dry	0.0536		BRL				40
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	0.0896	502	mg/kg dry		0.0536		167	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.0687		mg/kg dry		0.0536		128	30-150		
Surrogate: Decachlorobiphenyl (Sr)	0.0802		mg/kg dry		0.0536		150	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	0.0743		mg/kg dry		0.0536		139	30-150		
Matrix Spike (1104885-MS1)			Source: SB:	<u> 25896-33</u>	<u>Pre</u>	pared: 21-	Mar-11 An	alyzed: 24-N	1ar-11	
Aroclor-1016	0.635		mg/kg dry	0.0624	0.780	BRL	81	40-135		
Aroclor-1016 [2C]	0.625		mg/kg dry	0.0624	0.780	BŖL	80	40-135		
Aroclor-1260	0.668		mg/kg dry	0.0624	0.780	BRL	86	40-135		
Aroclor-1260 [2C]	0.725		mg/kg dry	0.0624	0.780	BRL	93	40-135		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	0.0530		mg/kg dry		0.0624		85	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.0536		mg/kg dry		0.0624		86	30-150		
Surrogate: Decachlorobiphenyl (Sr)	0.0655		mg/kg dry		0.0624		105	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	0.0568		mg/kg dry	•	0.0624		91	30-150		
Matrix Spike Dup (1104885-MSD1)			Source: SB:	25896 <u>-33</u>	<u>Pre</u>	pared: 21-	Mar-11 An	alyzed: 24-N	lar-11	
Aroclor-1016	0.545		mg/kg dry	0.0578	0.722	BRL	76	40-135	8	30
Aroclor-1016 [2C]	0.533		mg/kg dry	0.0578	0.722	BRL	74	40-135	8	30
Aroclor-1260	0,580		mg/kg dry	0.0578	0.722	BRL	80	40-135	6	30
Aroclor-1260 [2C]	0.654		mg/kg dry	0.0578	0.722	BRL	91	40-135	3	30
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	0.0569		mg/kg dry		0.0578		98	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.0500		mg/kg dry		0.0578		87	30-150		
Surrogate: Decachiorobiphenyl (Sr)	0.0621		mg/kg dry		0,0578		108	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	0.0601		mg/kg dry		0.0578		104	30-150		

# General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1104942 - General Preparation										
<u> Duplicate (1104942-DUP1)</u>			Source: SE	325896-11	Po	epared & A	nalyzed: 22	-Mar-11		
% Solids	70.9		%		_	69.0			3	20
Batch 1104943 - General Preparation		•								
Duplicate (1104943-DUP1)			Source: SE	325896-31	Pr	epared & A	nalvzed: 22	-Mar-11		
% Solids	97.9		%		. –	97.5			0.4	20
Batch 1104962 - General Preparation										
<u>Duplicate (1104962-DUP1)</u>			Source: SE	325896-51	Pr	epared & A	nalyzed: 22	-Mar-11		
% Solids	83,5		%			84.0		1	0.5	20

#### **Notes and Definitions**

QM2	The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration
	of analyte inherent in the sample.

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

BRL Below Reporting Limit - Analyte NOT DETECTED at or above the reporting limit

dry Sample results reported on a dry weight basis

NR Not Reported

RPD Relative Percent Difference

J Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).

A plus sign (+) in the Method Reference column indicates the method is not accredited by NELAC.

<u>Laboratory Control Sample (LCS)</u>: A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

<u>Matrix Spike</u>: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

<u>Surrogate</u>: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Continuing Calibration Verification: The calibration relationship established during the initial calibration must be verified at periodic intervals. Concentrations, intervals, and criteria are method specific.

Validated by: June O'Connor Rebecca Merz

# Reasonable Confidence Protocols Laboratory Analysis QA/QC Certification Form

Laboratory Name: Spectrum Analytical, Inc.

Client: TRC - Windsor, CT

Project Location: Quirk Middle School - Hartford, CT

Project Number: 181125.1000.0000

Sampling Date(s):

Laboratory Sample ID(s):

3/18/2011

SB25896-01 through SB25896-54

RCP Methods Used: SW846 8082A

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence Protocol documents?	1	Yes	·	No
1A	Were the method specified preservation and holding time requirements met?	1	Yes		No
1B	VPH and EPH methods only: Was the VPH or EPH method conducted without significant modifications (see Section 11.3 of respective RCP methods)?		Yes		No
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	. 1	Yes		No
3	Were samples received at an appropriate temperature?	7	Yes		No
4	Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents . achieved?		Yes	1	No
5	a) Were reporting limits specified or referenced on the chain-of-custody? * b) Were these reporting limits met? *Exceptions are defined by qualifiers		Yes Yes	1	No No
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	1	Yes	<u>_</u>	No
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	1	Yes	<del></del>	No

Note: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet the requirements for "Reasonable Confidence."

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for obtaining the information contained in this analytical report, such information is accurate and complete.

Nicole Leja Laboratory Director

Micole Leja

Date: 3/25/2011

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# APPENDIX B Public Communication Procedure

#### Insert Date Here

#### Draft Notification to Parents, Teachers and Employee Organizations

International Baccalaureate School (formerly Thomas J. Quirk Middle School) East Building and Connectors will commence a demolition and renovation program starting on *[insert date]*. During this program there will be removal of asbestos containing materials, and PCB-contaminated building materials at the school.

The asbestos and PCB abatement programs were authorized by the State of Connecticut Departments of Public Health (CT DPH) and Environmental Protection (CT DEP), the United States Environmental Protection Agency Region 1 (EPA) and Connecticut Schools Facility Unit after careful planning and thorough review.

Workers and students will not use the International Baccalaureate School while removal and abatement is ongoing. The School will reopen after the asbestos and PCB abatement work along with the planned renovations are completed.

The asbestos and PCB abatement work will be performed by a Connecticut Department of Public Health licensed asbestos abatement contractor and personnel experienced in the handling of PCB contaminated materials, insert contractor name here. Asbestos and PCB abatement work will be monitored continuously by insert contractor name here, an independent environmental consultant hired by the State to conduct inspection and testing during asbestos and PCB abatement activities.

As required by the CT DPH, CT DEP and EPA, this notification is being sent to parents, teachers, and employee organizations at the International Baccalaureate School. Any questions about the project may be directed to, *insert contact name here*.

We appreciate your patience and understanding during this process.

Sincerely,

insert contact name here.

(please turn over  $\rightarrow$ )

State of Connecticut

Department of Public Health

Division of Environmental Health 410 Capitol Avenue, MS#51AIR

Hartford, CT 06134-0308

860-509-7367

State of Connecticut

Department of Environmental Protection

79 Elm Street

Hartford, CT 06106

860-424-3329

Asbestos/PCB Consultant:

To be determined Street Address City, State Zip Code Contact Number

Asbestos/PCB Abatement Contractor:

To be determined Street Address City, State Zip Code Contact Number

cc:

insert contact name here, Mayor, City of Hartford

insert contact name here, General Manager, City of Hartford

insert contact name here, Superintendent of Schools

insert contact name here, Principal, International Baccalaureate School

# APPENDIX C EPA Region 1 SOP

Rev. #: Date:

0.0 12/01/97

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# REGION I, EPA-NEW ENGLAND

# **DRAFT** STANDARD OPERATING PROCEDURE FOR SAMPLING CONCRETE IN THE FIELD



# U.S. EPA-NEW ENGLAND Region I Quality Assurance Unit Staff Office of Environmental Measurement and Evaluation

Prepared by:

Man W Peterson

Date: 12/30/97

**Quality Assurance Chemist** 

Andrew Beliveau

Date: 12/30/97

Reviewed by:

Senior Technical Specialist

Date: 12/30/97

Approved by:

Nancy Barmakian

**Branch Chief** 

Rev, #: Date:

0.0 12/01/97

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# Region I, EPA New England

# Standard Operating Procedure for Sampling Concrete in the Field

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#### Region I, EPA New England

Standard Operating Procedure for Sampling Concrete in the Field

# 1.0 Scope and Application

The following Standard Operating Procedure (SOP) describes a concrete sampling technique which uses an impact hammer drill to generate a uniform, finely ground, powder which is easily homogenized, extracted and analyzed. This procedure is primarily geared at providing enough sample for one or two different analyses at a time. That is, the time required to generate sufficient sample for a full sweet of analyses may be impractical. The concrete powder is suitable for all types of environmental analyses, with the exception of volatile compounds, and may be analyzed in the field or at a fixed laboratory. This procedure is applicable for the collection of samples from concrete floors, walls, and ceilings.

The impact hammer drill is far less labor intensive than previous techniques using coring devices, or hammers and chisels. It allows for easy selection of sample location and sample depth. Not only can the project planner control the depth to sample into the concrete, from surface samples (0 - ½ inch) down to a core of the entire slab, but the technique can also be modified to collect samples at discrete depths within the concrete slab.

Another issue with concrete sampling is the fact that the amount of time spent drilling translates into the weight of sample produced. Thus, to maximize sampling time, it is important to know the minimum amount of sample required for each analysis. To do this, the project planner should take the following steps: 1) Use the Data Quality Objective (DQO) process and familiarity with the site to develop the objectives of the sampling project and the depth(s) of sample to be collected. 2) Review the site history and any previous data collected to determined possible contaminants of concern. 3) Establish the action levels for those possible contaminants and determine the appropriate analytical methods (both field and/or fixed laboratory) to meet the DQOs of the project. 4) Based on the detection limits of these methods, determine the amount of sample required for each analysis and the total sample weight require for each sample location (including quality control samples).

As with any environmental data collection project, all aspects of a concrete sampling episode should be well thought out, prior to going out in the field, and thoroughly described in a Quality Assurance Project Plan (QAPP). The QAPP should clearly state the DQOs of the project and document a complete Quality Assurance/Quality Control program to reconcile the data generated with the established DQOs. For more information on these subjects, refer to EPA documents QA/R-5, EPA Requirements for Quality Assurance Project Plans for Environmental Data Operations, and QA/G-4, Guidance for the Data Quality Objective Process.

#### 2.0 Method Summary

A one-inch diameter carbide drill bit is used in a rotary impact hammer drill to generate a fine concrete powder suitable for analysis. The powder is placed in a sample container and homogenized for field or fixed laboratory analysis. The procedure can be used to sample a single depth into the concrete, or may be modified to sample the concrete at distinctly different depth zones. The modified depth sampling procedure is designed to minimize any cross contamination between the sampling zones. If different

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sampling depths are required, two different diameter drill bits and a vacuum sampling apparatus are employed.

### 3.0 Health and Safety

Eye and hearing protection are required at all times during sample drilling. A small amount of dust is generated during the drilling process. Proper respiratory protection and/or a dust control system must be in place at all times during sampling.

#### 4.0 Interferences and Potential Problems

Since this sampling technique produces a finely ground uniform powder, physical matrix effects from variations in the sample consistency (i.e., particle size, uniformity, homogeneity, and surface condition) are minimized. Matrix spike analysis of a sample is highly recommended to monitor for any matrix related interferences.

As stated in Section 1.0 above, this sampling procedure is not recommended for volatile organic compound (VOC) analysis. The combination of heat generated during drilling and the exposure of a large amount of surface area will greatly reduce VOC recovery. If low boiling point semi-volatile compounds (i.e., naphthalene) are being analyzed, then the drill speed should be reduced to minimize heat build-up.

# 5.0 Equipment and Supplies

# 5.1 Single Depth Concrete Sampling

5.1.1	Rotary impact hammer drill
	rectary impact naminic dini

- 5.1.2 1-inch diameter carbide drill bits
- 5.1.3 Stainless steel scoopulas
- 5.1.4 Stainless steel spoonulas (for collecting sample in deeper holes, >2-inches)
- 5.1.5 Rectangular aluminum pans (to catch concrete during wall and ceiling sampling)
- 5.1.6 Gasoline powered generator (if alternative power source is required)

# 5.2 Multiple Depth Sampling (in addition to all the above)

- 5.2.1 ½ inch diameter carbide drill bits
- 5.2.2 Vacuum/sample trap assembly (see Section 7.2 and Figure 1)
- 5.2.2.1 Vacuum pump
- 5.2.2.2 2-hole rubber stopper
- 5.2.2.3 Glass tubing (to fit stopper)
- 5.2.2.4 Large glass test tubes, or Erlenmeyer flasks, for sample trap (several are suggested)
- 5.2.2.5 Polyethylene tubing for trap inlet (Tygon tubing may be used for the trap outlet)
- 5.2.2.6 Pasture pipets
- 5.2.2.7 Pipe cleaners
- 5.2.2.8 In-line dust filter (glass fiber filter, or equivalent)

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# 6.0 Sample Containers, Preservation, and Storage

Concrete samples must be collected in glass containers for organic analyses, and may be collected in either glass or plastic containers for inorganic analyses. In general, a 2-ounce sample container with Teflon-lined cap (wide-mouth jars are preferred) will hold sufficient volume for most analyses. A 2-ounce jar can hold roughly 90 grams sample. Note, samples which require duplicate and/or matrix spike/matrix spike duplicate analyses may require a larger sample container, or additional 2-ounce sample containers.

Organic samples are to be shipped on ice and maintained at 4°C (± 2°C) until the time of extraction and analysis. Inorganic samples may be shipped and stored at room temperature. Refer to 40 CFR Part 136 for guidelines on analysis holding times.

To maintain sample integrity, chain-of-custody procedures must be implemented at the time of sampling to 1) document all sample locations and associated field sample identification numbers, 2) document all quality control samples taken, including field duplicates, split samples for confirmatory analyses, and PE samples, and 3) document the transfer of field samples from field sampler to field chemist or fixed laboratory.

#### 7.0 Procedure

### 7.1 Single Depth Concrete Sampling

Lock a 1-inch diameter carbide drill bit into the impact hammer drill and plug the drill into an appropriate power source. (A gasoline generator will be needed if electricity is not available.) For easy identification, sample locations may be pre-marked using a crayon or a non-contaminating spray paint. (Note, the actual drilling point must not be marked.) Depending on the appearance of the sample location, or the objectives of the sampling project, it may be desired to wipe the concrete surface with a clean dry cloth prior to drilling. All sampling decisions of this nature should be noted in the sampling logbook. Begin drilling in the designated location. Apply steady even pressure and let the drill do the work. Applying too much pressure will generate excessive heat and dull the drill bit prematurely. The drill will provide a finely ground concrete powder that can be easily collected, homogenized and analyzed. Having several decontaminated impact drill bits on hand will help expedite sampling when numerous sample locations are to be drilled.

#### Sample Collection

A ½-inch deep hole (using a 1-inch diameter drill bit) generates about 10 grams of concrete powder. Based on this and the action levels for the project, determine the sampling depth, and/or the number of sample holes to be composited, to generate sufficient sample volume for all of the required analyses. (Note, with the absorbency of concrete, a ½-inch deep hole can be considered a surface sample.)

A decontaminated stainless steel scoopula can be used to collect the sample. The powder can either be collected directly from the surface of the concrete and/or the concrete powder can be scraped back into the hole and the less rounded back edge of the scoopula can be used to collect the sample. For holes greater than 2-inches in depth, a stainless steel spoonula will make it easier to collect the sample from the bottom of the hole.

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To ensure collection of a representative sample when multiple analyses are required, a concrete sample should always be collected and homogenized in a single container and then divided up into the individual containers for the various analyses or split samples. This is particularly important when sample holes are deep, or when several holes are drilled adjacent to each other to form a sample composite.

#### Wall and Ceiling Sampling

A team of two samplers will be required for wall and ceiling sampling. The second person will be needed to hold a clean catch surface (i.e., an aluminum pan) below the drill to collect the falling powder. For wall samples, a scoopula, or spoonula, can be used to collect remaining concrete powder from within the hole. For ceiling holes, it may be necessary to drill the hole at an angle so the concrete powder can fall freely in the collection plan (and avoid falling on the drill). Another alternative might be to use the chuck-end of the drill bit and punch a hole through the center of the collection pan. The drill bit is then mounted through the pan and into the drill. Thus, the driller can be drilling straight up while the assistant steadies the pan to catch the falling dust. As a precaution, it may be advantageous to tape a piece of plastic around the drill, just below the chuck, to avoid dust contaminating the body of the drill and entering the mechanical vents. (Note, the plastic should deflect dust from the drill, but be loose enough underneath to allow for proper ventillation.)

## 7.2 Multiple Depth Concrete Sampling

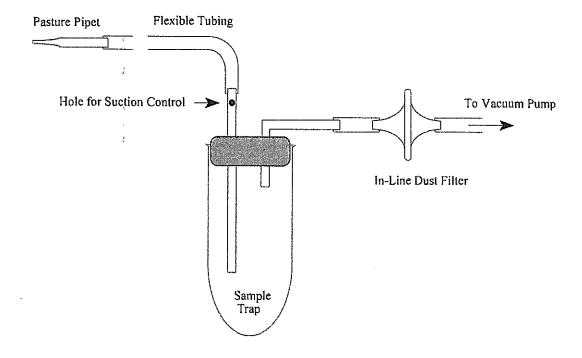
The above method for concrete sampling can also be used to collect samples from different depths within the concrete. To do this, two different sized drill bits (i.e., ½ inch and 1 inch) and a simple vacuum pump with a vacuum trap assembly is required (see Figure 1). First, the 1 inch drill bit is used to drill to the first level and the concrete sample is collected as described in Section 7.1. The vacuum pump is then turned on and the hole is cleaned out using the vacuum trap assembly. The drill bit is then changed to the ½ inch bit and the next depth is drilled out (the ½ inch bit is used to avoid contact with the sides of the first hole). A clean tube or flask is placed on the vacuum trap, and the sample from the second drilling is collected. To go further, the 1 inch drill is used to open up the hole to the second level, the hole is cleared, and then the ½ inch drill is used again to go to a third level, etc. Note, the holes and concrete surface should be vacuumed thoroughly to minimize any cross-contamination between sample depths.

#### Vacuum Trap Design and Clean-out

The trap presented in Figure 1 is a convenient and thorough way for collecting and removing concrete powder from drilled holes. The trap system is designed to allow for control of the suction from the vacuum pump and easy trap clean-out between samples. Note, by placing a hole in the inlet tube (see Figure 1), a finger on the hand holding the trap can be used to control the suction at the sampling tip. Thus, when this hole is left completely open, there will be no suction, and the sampler can have complete control over where and what to sample. To change-out between samples the following steps should be taken: 1) The pasture pipet and piece of polyethylene tubing at the sample inlet should be replaced with new materials, 2) the portion of the rubber stopper and glass tubing that was in the trap should be wiped down with a clean damp paper towel (wetted with deionized water) and then dried with a fresh paper towel, 3) a clean pipe cleaner should be drawn through the glass inlet tube to remove any concrete dust present, and 4) the glass tube or flask used to collect the sample should swapped out with a clean decontaminated sample trap. Having several clean tubes or flasks on hand will facilitate change-out between samples.

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Figure 1



#### 7.3 Decontamination Procedure

Necessary supplies for decontamination include: two small buckets, a scrub brush, potable water, deionized water, a squirt bottle for the deionized water, and paper towels. The first bucket contains a soap and potable water solution, and the second bucket contains just potable water. Place all used drill bits and utensils in the soap and water bucket. Scrub each piece thoroughly using the scrub brush. Note, the concrete powder does cling to the metal surfaces, so care should be taken during this step, especially with the twists and curves of the drill bits. Next, rinse each piece in the potable water bucket, and follow with a deionized water rinse from the squirt bottle. Place the deionized water rinsed pieces on clean paper towels and individually dry and inspect each piece. Note, all pieces should be dry prior to reuse.

#### 8.0 Field Documentation

All Site related documentation and reports generated from concrete sampling should be maintained in the central Site file. If personal logbooks are used, legible copies of all pertinent pages must be placed in the Site file.

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#### 8.1 Field Logbooks

All field documentation should be maintained in bound logbooks with numbered pages. If loose-leaf logsheets are used to document site activities, extra care should be taken in keep track of all logsheets. The original copy of all logsheets should be maintained in the central Site file. Note, all sample locations must be documented by tying in their location to a detailed site map, or by using two or more permanent landmarks. The following information should be documented in the field logbooks:

- Site name and location.
- · EPA Site Manager,
- Name and affiliation of field samplers (EPA, Contractor company name, etc.),
- Sampling date,
- · Sample locations and IDs,
- Sampling times and depths, and
- Other pertinent information or comments

#### 8.2 Sample Labeling and Chain-of-Custody

#### 8.2.1 <u>Sample Labels</u>

Sample labels will be affixed to all sample containers. Labels must contain the following information:

- Project name,
- Sample number, and/or location
- Date and time of sampling,
- Analysis,
- Preservation, and
- Sampler's name.

#### 8.2.2 <u>Chain-of-Custody</u>

All samples must be traced from collection, to shipment, to laboratory receipt and laboratory custody. The Chain-of-Custody (COC) Record is a multi-part form that is initiated as samples are acquired and accompanies a sample (or group of samples) as they are transferred from person to person. The COC form is signed by all individuals responsible for sampling, sample transport, and laboratory receipt. (Note, overnight deliver services, often used with sample transport, are exempt from having to sign the COC form. However, copies of all shipping invoices must be kept with the COC documentation.) One copy of the COC is retained by the field sampling crew, while the original (top, signed copy) and remaining carbonless copies are placed in a zip-lock bag and taped to the inside lid of the shipping cooler. If multiple coolers are required for a sample shipment to a single laboratory, the COC need only be sent with one of the coolers. The COC should state how many coolers are included with the shipment. All sample shipments to different laboratories require individual COC forms. The original COC form accompanies the samples until the project is complete, and is then kept in the permanent project file. A copy of the COC is also kept with the project manager, the laboratory manager, and attached to the data package.

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#### 8.2.3 Custody Seal

The Custody seal is an adhesive-backed label which is also part of the chain-of-custody process. The custody seal is used to prevent tampering with the samples after they have been collected in the field and sealed in coolers for transit to the laboratory. The Custody seals are signed and dated by a sampler and affixed across the opening edges of each cooler containing samples. Clear packing tape should be wrapped around the cooler, and over the Custody seal, to secure the cooler and avoid accidental tampering with the Custody seal.

# 9.0 Quality Assurance and Quality Control (QA/QC)

A solid QA/QC program is essential to establishing the quality of the data generated so that proper project decisions can be made. The following are key quality control elements which should be incorporated into a concrete sampling and analytical program.

#### 9.1 Equipment Blanks

An equipment blank should be performed on decontaminated drill bits and collection utensils at a frequency of 1 per 20 samples or 1 per day, whichever is greater. To prepare the equipment blank, place the decontaminated drill bit and utensils in a large clean stainless steel bowl. Pour sufficient deionized water into the bowl to fill all of the required sample containers. Next, stir the drill bit and utensils in the bowl with a clean utensil to thoroughly mix the blank. Finally, decant off the equipment blank into the sample containers. Note, a clean funnel may help to pour off the equipment blank into the containers.

#### 9.2 Field Duplicates

Field duplicates are samples collected adjacent to each other (collocated) at the same sample location (not two aliquots of the same sample). Field duplicates not only help provide an indicator of overall precision, but measure the cumulative effects of both the field and analytical precision, and also measure the representativeness of the sample. Field duplicates must be prepared and analyzed at a frequency of 1 per 20 samples or 1 per non-related concrete matrix, whichever is greater. An example of a non-related concrete matrix might be the investigation of two different types of chemical spills.

Calculate the Relative Percent Difference (RPD) between the sample and its duplicate using Equation 1.

Equation 1

$$RPD = \frac{\mid S - D \mid}{\underbrace{(S + D)}} \times 100$$

Where:

S = Original sample result
D = Duplicate sample result

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Date:

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The following general guidelines have been established for field duplicate criteria:

• If both the original and field duplicate values are ≥ practical quantitation limit (PQL), then the control limit for RPD is ≤50%,

If one or both values are < PQL, then do not assess the RPD.</li>

If more rigorous field duplicate criteria are needed to achieve project DQOs, then that criteria should be documented in the project QAPP.

If the field duplicate criteria specified above are not met, then flag that target element with an "\*" on the final report for both the original and field duplicate samples. Report both the original and field duplicate analyses; do not report the average. Field duplicate samples should should be indicated on the sample ID. For example, the sample ID can contain the the suffix "FD".

### 9.3 Laboratory Duplicates

Laboratory duplicates are two aliquots of the same sample that are prepared, homogenized and analyzed in the same manner. (Note, proper sample homogenization is critical in producing meaningful results.) The precision of the sample preparation and analytical methods is determined by performing a laboratory duplicate analysis. Laboratory duplicates can be prepared in the field and submitted as blind samples, or the laboratory can be requested to perform the laboratory duplicate analysis. In the case of laboratory prepared duplicates, the field sampling team must be sure to provide sufficient sample volume. Laboratory duplicates must be prepared and analyzed at a frequency of 1 per 20 samples or 1 per non-related concrete matrix, whichever is greater.

Calculate the RPD between the sample and its duplicate using Equation 1. The following general guidelines have been established for laboratory duplicate criteria:

- If both the original and laboratory duplicate values are ≥ PQL, then the control limit for RPD is ≤25%,
- If one or both values are < PQL, then do not assess the RPD.</li>

If duplicate criteria are not met, then flag that target element with an "\*" on the final report for both the original and duplicate samples. Report both the original and duplicate analyses; do not report the average.

# 9.4 Matrix Spike/Matrix Spike Duplicate Samples

Matrix spike/matrix spike duplicate samples (MS/MSDs) are two additional aliquots of a sample which are spiked with the appropriate compound(s) or analyte(s) of concern and then prepared and analyzed along with the original sample. (Note, proper sample homogenization, prior to spiking, is critical in producing meaningful results.) MS/MSDs help evaluate the effects of sample matrix on the analytical methods being used. The field sampling team must provide sufficient sample volume such that the field or fixed laboratory can prepare and analyze MS/MSDs at a frequency of 1 per 20 samples or 1 per non-related concrete matrix, whichever is greater.

# APPENDIX D Notification and Certification



#### CITY OF HARTFORD

#### DEPARTMENT OF PUBLIC WORKS 525 MAIN STREET HARTFORD, CONNECTICUT 06103



TELEPHONE: (860) 757-9900 FAX: (860) 722-6215

PEDRO E. SEGARRA MAYOR

KEVIN BURNHAM, P.E. DIRECTOR

May 9, 2011

Kimberly N. Tisa
Region 1 PCB Administrator
United States Environmental Protection Agency
1 Congress Street, Suite 1100-CPT
Boston, MA 02114-2023

#### Via Mail

Re:

Notification and Certification Pursuant to 40 CFR 761.61(a)(3)(i)(E)

Self-Implementing Cleanup Plan for International Baccalaureate School East

**Building and Connectors** 

85 Edwards Street, Hartford, CT

Dear Ms. Tisa:

Attached is a copy of the remedial plan developed to address PCB-containing building materials at International Baccalaureate School East Building and Connectors for review by EPA. Implementation of this plan will allow for the safe removal and proper disposal of PCB-containing materials prior to demolition/renovation activities at the site. This letter and the attached remedial plan constitute the notification required to local authorities at least 30 days prior to the date of initiating remediation under §761.61(a)(3)(i). Work will not commence without having received approval from EPA.

This certification is to accompany the Self-Implementing Cleanup Plan for the removal and abatement work to be performed prior to and during renovation/demolition activities at the site owned by City of Hartford in Hartford, Connecticut. TRC Environmental (TRC) has prepared this plan under the provisions specified in §§761.61(c) and 761.61(a) for the remedial work to be performed at the International Baccalaureate School East Building and Connectors located on 85 Edwards Street in Hartford, Connecticut.

# Certification Pursuant to 40 CFR 761.61(a)(3)(i)(E)

I certify that all sampling plans, sample collection procedures, sample preparation procedures, extraction procedures, and instrumental/chemical analysis procedures used to assess or characterize the PCB contamination at the cleanup site are on file at the offices of TRC Environmental, 21 Griffin Road North, Windsor, Connecticut, and are available for EPA inspection.

If you have any questions you may contact Jennifer Peshka, TRC, at 860-298-9692 or via email at <a href="mailto:jpeshka@trcsolutions.com">jpeshka@trcsolutions.com</a>.

Sincerely

James A. Keaney Jr.

Director of Capital Projects, City of Hartford

CC:

Gary Trombly, CTDEP Dr. Christina Kishimoto, Superintendent of Schools

Erik Plimpton, CHMM, PE, TRC

# Plimpton, Erik (Windsor, CT-US)

From:

Plimpton, Erik (Windsor, CT-US)

Sent:

Wednesday, August 31, 2011 4:54 PM 'Woodward.Katherine@epamail.epa.gov'

To: Cc:

Tisa.Kimberly@epamail.epa.gov

Subject:

RE: International Baccalaureate School SIP Comments

HSBC accepts the EPAs proposed verification sampling frequency for IB School.

Please expedite the Notification approval letter, as they need it in order to be allowed to bid the project by CT Bureau of School Facilities.

thanks

Erik R. Plimpton, PE, CHMM Managing Principal Building Sciences Practice Leader

21 Griffin Road North, Windsor, CT 06095

T: 860-298-6280 | F: 860-298-6380 | C: 860-798-4699

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----Original Message----

From: Woodward.Katherine@epamail.epa.gov [mailto:Woodward.Katherine@epamail.epa.gov]

Sent: Wednesday, August 31, 2011 4:23 PM

To: Plimpton, Erik (Windsor,CT-US)
Cc: Tisa.Kimberly@epamail.epa.gov

Subject: RE: International Baccalaureate School SIP Comments

(See attached file: Proposed EPA Approval Verification Samples by Location and Porous Surface Type1.docx)

Erik,

The attached table is the PCB Program's proposed Verification Sampling Frequency for the IB School. This draft document has not yet been reviewed by our management and is subject to change based on management review.

Please feel free to call us, if you have any questions.

Katherine Woodward, PE Environmental Protection Agency 5 Post Office Square, Suite 100

Mail Code: OSRR07-2 Boston, MA 02109-3912 Phone: 617-918-1353 From: "Plimpton, Erik (Windsor,CT-US)"

<EPlimpton@trcsolutions.com>

To: Katherine Woodward/R1/USEPA/US@EPA

Cc: Kimberly Tisa/R1/USEPA/US@EPA

Date: 08/29/2011 03:43 PM

Subject: RE: International Baccalaureate School SIP Comments

Further clarification below

Erik R. Plimpton, PE, CHMM Managing Principal Building Sciences Practice Leader21 Griffin Road North, Windsor, CT

T: 860-298-6280 | F: 860-298-6380 | C: 860-798-4699

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----Original Message----

From: Woodward.Katherine@epamail.epa.gov [mailto:Woodward.Katherine@epamail.epa.gov] Sent: Friday, August 26, 2011 11:54 AM
To: Plimpton Frik (Windson CT-US)

To: Plimpton, Erik (Windsor, CT-US)
Cc: Tisa.Kimberly@epamail.epa.gov

Subject: RE: International Baccalaureate School SIP Comments

Erik,

We still have questions about the caulks and glazing that is in the bridge connectors, and about the concrete in contact with the exterior window sill cap caulk on the first floor.

In your email, you say that there are caulks and glazing in the bridges that are homogeneous with caulk in the East Building and that they are shown in figure 3C. Only type 1 interior window glazing is shown on the figure.

Is there caulk as well, or are there only windows in the bridges? What is the plan to dispose of the materials in the bridges?

#### Caulks & Glazes:

Figure 3C - Interior window glazing type 1 (WG1) (>1<50 ppm)
Figure 2 - Exterior window caulk (EWC) & window glazing
(EWG1) (both >1<50 ppm)
Figure 2 - Exterior window sill cap caulk (EWS) (>50 ppm)
Figure 2A - Exterior expansion joint caulk (EJC) (>50 ppm)

The connecting bridges are to be demolished as part of the renovation project. Asbestos, misc. hazmat items and any PCB Bulk Product Waste, State Regulated caulk/glaze and associated PCB Remediation Wastes shall be removed prior to demolition and the remainder of the building materials shall be disposed of as C&D Bulky Wastes at a permitted C&D Solid Waste Landfill and/or recycled as Clean Fill or Scrap Metal.

Concerning the concrete under the metal sill caps on the first floor- we need some clarification. The difficulty may be that, from the description, we are envisioning different construction than is actually present. Do you have any photographs of the sill caps on the first floor that show where the caulk, metal sill cap and concrete meet?

Photos attached Essentially there are a bank of windows on the first floor where metal caps were applied over the concrete window sill, and they are adhered with a black caulk (Exterior window sill cap caulk (EWS)). EWS is also found below metal caps on exterior window sills on the 2nd and 3rd floors, however those sills are brick façade, not concrete.

(Embedded image moved to file: pic11051.jpg)(Embedded image moved to file: pic25391.jpg)(Embedded image moved to file: pic16534.jpg)

Your email suggests that the Contractor decision to dispose of the concrete as > 50 ppm waste is based on effort to cut the concrete, which would require repair or replacement. If you cut the concrete 3" from the caulk joint and dispose of the remainder at a C & D landfill, won't that also require repair or replacement?

Yes, the decision would be to either 1) remove the concrete sill entirely (for disposal as >50ppm waste) and replace; or 2) cut at 3", complete verification sampling, and then either repair, or remove remainder for disposal/recycling as "clean fill" C&D and replace.

If you have questions, please call.

Katherine Woodward, PE Environmental Protection Agency 5 Post Office Square, Suite 100

Mail Code: OSRR07-2 Boston, MA 02109-3912 Phone: 617-918-1353

From: "Plimpton, Erik (Windsor, CT-US)"

<EPlimpton@trcsolutions.com>

To: Katherine Woodward/R1/USEPA/US@EPA

Cc: Kimberly Tisa/R1/USEPA/US@EPA

Date: 08/25/2011 01:28 PM

Subject: RE: International Baccalaureate School SIP Comments

Please see response below in red italics

In addition, please note, the CT Bureau of School Facilities is not allowing the Hartford School Building Committee to bid this \$50M+ renovation project out until the SIP is finalized, and the project schedule is being impacted, so anything you can do to expedite this review/approval would be very much appreciated.

Erik R. Plimpton, PE, CHMM Managing Principal

Building Sciences Practice Leader21 Griffin Road North, Windsor, CT

T: 860-298-6280 | F: 860-298-6380 | C: 860-798-4699

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----Original Message----

From: Woodward.Katherine@epamail.epa.gov [ mailto:Woodward.Katherine@epamail.epa.gov]

Sent: Wednesday, August 24, 2011 11:31 AM

To: Plimpton, Erik (Windsor, CT-US) Cc: Tisa.Kimberly@epamail.epa.gov

Subject: International Baccalaureate School SIP Comments

Eric,

We have reviewed your response to our comments that were submitted on July 27. There are a couple of items where we need some additional clarification.

1. In response 2b, your last bullet states that the tunnels were included in the investigation. Were the connector bridges also included? If so, were there any caulks or glazing present?

The bridges were included in the investigation. Caulks and glazes were identified on the bridges. They were homogeneous to caulks/glazes identified and sampled on the East Building and are included as applicable in the SIP and on the drawings as depicted on Figure 3C.

2. Concerning the concrete sills, on the first floor in contact with the Exterior Window Sill Cap Caulk- Are the concrete sills being cut at a distance of 3 " from the caulk or is the entire sill being removed? How are the sills being disposed of?

Concrete sills are specified to be cut at a distance of 3" from the caulk, based on initial substrate sampling data indicating 3" depth in concrete to have PCB impact less than 1ppm, and disposed of as PCB>50ppm waste. Post removal verification testing as described Section 3.5 to be performed to ensure remaining concrete less than 1ppm. As such remaining concrete shall be disposed of as C&D Bulky Waste at a permitted C&D Solid Waste Landfill and/or recycled as CTDEP Clean Fill. Alternatively, at the discretion of the Construction Manager, the entire concrete sill may be removed and disposed of as >50ppm waste to reduce abatement labor effort to cut the sills, which would then require repair/replacement.

If you have any questions please feel free to contact me or Kim Tisa at 617-918-1527

Katherine Woodward, PE Environmental Protection Agency 5 Post Office Square, Suite 100 Mail Code: OSRR07-2 Boston, MA 02109-3912

Phone: 617-918-1353

## Plimpton, Erik (Windsor, CT-US)

From: Sent:

James Foote liamesfoote@ogind.coml Wednesday, August 31, 2011 4:49 PM

To:

Plimpton, Erik (Windsor, CT-US)

Cc: Subject: John J. Butkus (jackbutkus@arcadis-ogind.com); Randy Becker; Nagardeolekar, Vikas

IB @ Quirk - EPA SIP Comments - we accept the EPA proposal (do we really have a choice?)

Attachments:

Proposed EPA Approval Verification Samples by Location and Porous Surface Type 1. docx

Importance:

High

Erik,

It sounds like you are recommending we accept the EPA proposal and it doesn't sound like there are any options other than to accept it, so we accept the EPA proposal based on your recommendation.

Please continue to expedite where possible and we are still looking for a draft / sample of the Owner written notification of acceptance for MD Fox -

Thanks,

Jim

----Original Message----

From: Plimpton, Erik (Windsor, CT-US) [mailto: EPlimpton@trcsolutions.com]

Sent: Wednesday, August 31, 2011 4:32 PM

To: James Foote

Cc: Peshka, Jennifer (Windsor, CT-US)

Subject: FW: International Baccalaureate School SIP Comments

Jim

I spoke with Kim Tisa at EPA earlier regarding the IB SIP.

They are drafting up the approval letter, but one thing they are going to impose is a little stricter substrate verification sampling than what we had proposed. The EPA proposal is attached. Its still a lot less sampling than what is prescribed in the regs (1 per 25 LF vs 1 per 5 LF), so you are still getting a big break, and ultimately its not that many more samples than what we had proposed.

I would recommend you accept it, particularly since they don't seem to be asking about going back to do any further caulk sampling any more to get more data to prove certain things are <50.

I told them I would get back to them after passing it by you.

Let me know if you want to accept it, and I will respond to them, and hopefully you will see the EPA approval letter for IB by next week, as this was the only item they brought up on the phone.

Erik R. Plimpton, PE, CHMM Managing Principal Building Sciences Practice Leader

Proposed EPA Approval Verification Samples by Location and Porous Surface Type<sup>1</sup>

Material/Location	Linear Feet (LF) of PCB caulk	Number of Samples at 3 inches	Proposed Number of samples/Frequency of Verification samples to be collected
Brick in contact with			4 samples total collected/1
Exterior Door Caulk	196	4	sample per 50 LF
Brick in contact with			14 samples total collected/
Exterior Window	Approximately	3	1 sample per 25 LF for 1 <sup>st</sup>
Sill Cap Caulk (East	592		100 LF, then 1 sample per 50
Building)			LF
Concrete in contact			
with Exterior	Approximately		4 samples total collected/
Window Sill Cap	100		I sample per 25 LF
Caulk			
Brick in contact with			12 samples total collected
Exterior Window	Approximately	0//	(3 per side)/
Sill Cap Caulk	320		1 sample per 25 LF
(Connector Bridges)			~ -
Brick in contact with			39 samples total collected/
Exterior Expansion	1840	1 4	1 sample per 25 LF for 1st
Joint Caulk			100 LF, then 1 sample per
			50 LF

<sup>&</sup>lt;sup>1</sup> The Notification proposed a verification sampling frequency of 1 sample every 50 linear feet. The required verification sampling frequency under 40 CFR 761 Subpart O is 1 sample every 5 feet. Under § 761.61 (c), EPA can approve an alternative sampling frequency. The above table identifies the PCB program's proposed verification sampling frequency for the IB School, Hartford, CT abatement project. This proposal is subject to change based on EPA management review.

# Plimpton, Erik (Windsor, CT-US)

From: Plimpton, Erik (Windsor, CT-US)
Sent: Monday, August 29, 2011 3:43 PM
To: 'Woodward.Katherine@epamail.epa.gov'

Cc: Tisa.Kimberly@epamail.epa.gov

Subject: RE: International Baccalaureate School SIP Comments

#### Further clarification below

Erik R. Plimpton, PE, CHMM
Managing Principal
Building Sciences Practice Leader21 Griffin Road North, Windsor, CT 06095
T: 860-298-6280 | F: 860-298-6380 | C: 860-798-4699

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----Original Message----

From: <a href="Moodward.Katherine@epamail.epa.gov">Moodward.Katherine@epamail.epa.gov</a> [mailto:Woodward.Katherine@epamail.epa.gov]

Sent: Friday, August 26, 2011 11:54 AM To: Plimpton, Erik (Windsor,CT-US) Cc: <u>Tisa.Kimberly@epamail.epa.gov</u>

Subject: RE: International Baccalaureate School SIP Comments

Erik,

We still have questions about the caulks and glazing that is in the bridge connectors, and about the concrete in contact with the exterior window sill cap caulk on the first floor.

In your email, you say that there are caulks and glazing in the bridges that are homogeneous with caulk in the East Building and that they are shown in figure 3C. Only type 1 interior window glazing is shown on the figure.

Is there caulk as well, or are there only windows in the bridges? What is the plan to dispose of the materials in the bridges?

- Caulks & Glazes:
  - Figure 3C Interior window glazing type 1 (WG1) (>1<50 ppm)</li>
  - o Figure 2 Exterior window caulk (EWC) & window glazing (EWG1) (both >1<50 ppm)
  - Figure 2 Exterior window sill cap caulk (EWS) (>50 ppm)
  - Figure 2A Exterior expansion joint caulk (EJC) (>50 ppm)
- The connecting bridges are to be demolished as part of the renovation project.

  Asbestos, misc. hazmat items and any PCB Bulk Product Waste, State Regulated caulk/glaze and associated PCB Remediation Wastes shall be removed prior to demolition and the remainder of the building materials shall be disposed of as C&D Bulky Wastes at a permitted C&D Solid Waste Landfill and/or recycled as Clean Fill or Scrap Metal.

Concerning the concrete under the metal sill caps on the first floorwe need some clarification. The difficulty may be that, from the description, we are envisioning different construction than is actually present. Do you have any photographs of the sill caps on the first floor that show where the caulk, metal sill cap and concrete meet?

- Photos attached
- Essentially there are a bank of windows on the first floor where metal caps were applied over the concrete window sill, and they are adhered with a black caulk (Exterior window sill cap caulk (EWS)). EWS is also found below metal caps on exterior window sills on the 2<sup>nd</sup> and 3<sup>rd</sup> floors, however those sills are brick façade, not concrete.







window sill cap caulk 2.JPG

window sill with metal cap wit...

window sill cap caulk 1.JPG

Your email suggests that the Contractor decision to dispose of the concrete as > 50 ppm waste is based on effort to cut the concrete, which would require repair or replacement. If you cut the concrete 3" from the caulk joint and dispose of the remainder at a C & D landfill, won't that also require repair or replacement?

• Yes, the decision would be to either 1) remove the concrete sill entirely (for disposal as >50ppm waste) and replace; or 2) cut at 3", complete verification sampling, and then either repair, or remove remainder for disposal/recycling as "clean fill" C&D and replace.

If you have questions, please call.

Katherine Woodward, PE Environmental Protection Agency 5 Post Office Square, Suite 100

Mail Code: OSRR07-2 Boston, MA 02109-3912 Phone: 617-918-1353

From: "Plimpton, Erik (Windsor, CT-US)"

<EPlimpton@trcsolutions.com>

To: Katherine Woodward/R1/USEPA/US@EPA
Cc: Kimberly Tisa/R1/USEPA/US@EPA

Date: 08/25/2011 01:28 PM

Subject: RE: International Baccalaureate School SIP Comments

Please see response below in red italics

In addition, please note, the CT Bureau of School Facilities is not allowing the Hartford School Building Committee to bid this \$50M+ renovation project out until the SIP is finalized, and the project schedule is being impacted, so anything you can do to expedite this review/approval would be very much appreciated.

Erik R. Plimpton, PE, CHMM Managing Principal Building Sciences Practice Leader21 Griffin Road North, Windsor, CT

T: 860-298-6280 | F: 860-298-6380 | C: 860-798-4699

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----Original Message----

From: <a href="mailto:Woodward.Katherine@epamail.epa.gov">Woodward.Katherine@epamail.epa.gov</a> [
mailto:Woodward.Katherine@epamail.epa.gov
Sent: Wednesday, August 24, 2011 11:31 AM

To: Plimpton, Erik (Windsor, CT-US)
Cc: Tisa.Kimberly@epamail.epa.gov

Subject: International Baccalaureate School SIP Comments

Eric,

We have reviewed your response to our comments that were submitted on July 27. There are a couple of items where we need some additional clarification.

1. In response 2b, your last bullet states that the tunnels were included in the investigation. Were the connector bridges also included? If so, were there any caulks or glazing present?

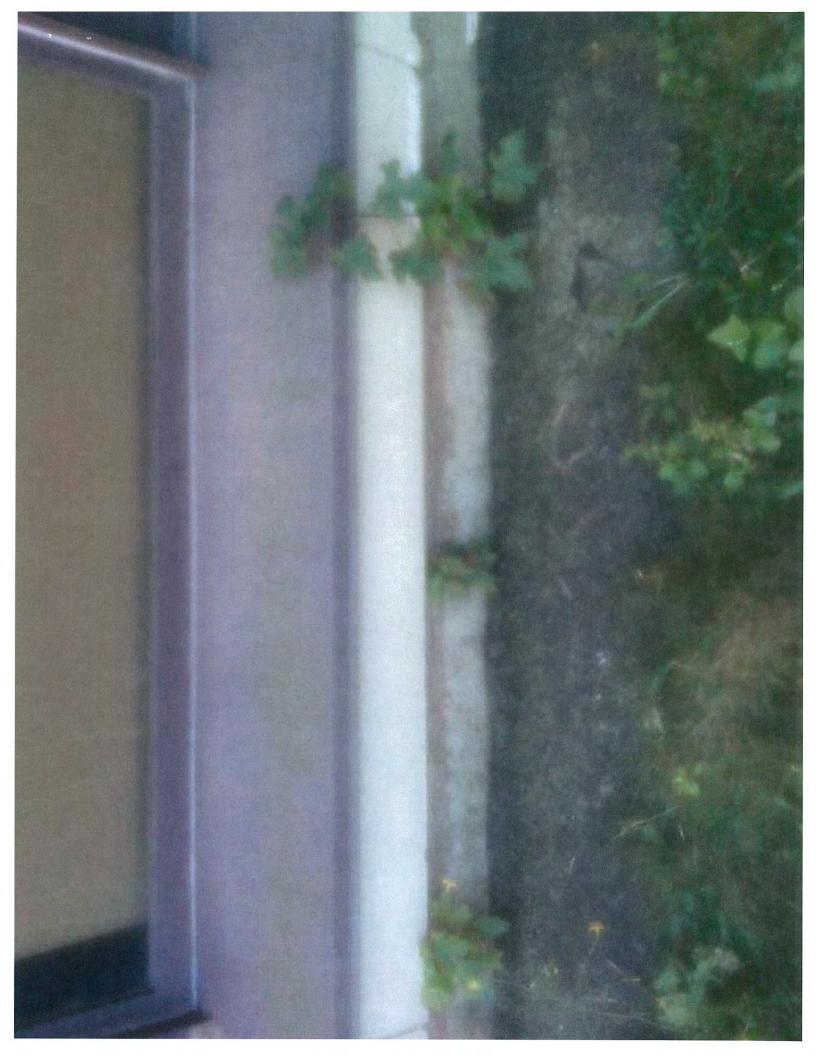
The bridges were included in the investigation. Caulks and glazes were identified on the bridges. They were homogeneous to caulks/glazes identified and sampled on the East Building and are included as applicable in the SIP and on the drawings as depicted on Figure 3C.

2. Concerning the concrete sills, on the first floor in contact with the Exterior Window Sill Cap Caulk- Are the concrete sills being cut at a distance of 3 " from the caulk or is the entire sill being removed? How are the sills being disposed of?

Concrete sills are specified to be cut at a distance of 3" from the caulk, based on initial substrate sampling data indicating 3" depth in concrete to have PCB impact less than 1ppm, and disposed of as PCB>50ppm waste. Post removal verification testing as described Section 3.5 to be performed to ensure remaining concrete less than 1ppm. As such remaining concrete shall be disposed of as C&D Bulky Waste at a permitted C&D Solid Waste Landfill and/or recycled as CTDEP Clean Fill. Alternatively, at the discretion of the Construction Manager, the entire concrete sill may be removed and disposed of as >50ppm waste to reduce abatement labor effort to cut the sills, which would then require repair/replacement.

If you have any questions please feel free to contact me or Kim Tisa at 617-918-1527

Katherine Woodward, PE Environmental Protection Agency 5 Post Office Square, Suite 100 Mail Code: OSRR07-2 Boston, MA 02109-3912 Phone: 617-918-1353







## Plimpton, Erik (Windsor, CT-US)

From: Sent: Plimpton, Erik (Windsor, CT-US) Thursday, August 25, 2011 1:30 PM 'Woodward.Katherine@epamail.epa.gov'

To: Cc:

Tisa.Kimberly@epamail.epa.gov

Subject:

RE: International Baccalaureate School SIP Comments

Please see response below in red italics

In addition, please note, the CT Bureau of School Facilities is not allowing the Hartford School Building Committee to bid this \$50M+ renovation project out until the SIP is finalized, and the project schedule is being impacted, so anything you can do to expedite this review/approval would be very much appreciated.

Erik R. Plimpton, PE, CHMM Managing Principal

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T: 860-298-6280 | F: 860-298-6380 | C: 860-798-4699

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----Original Message----

From: Woodward.Katherine@epamail.epa.gov [mailto:Woodward.Katherine@epamail.epa.gov]

Sent: Wednesday, August 24, 2011 11:31 AM

To: Plimpton, Erik (Windsor, CT-US)
Cc: Tisa.Kimberly@epamail.epa.gov

Subject: International Baccalaureate School SIP Comments

Eric,

We have reviewed your response to our comments that were submitted on July 27. There are a couple of items where we need some additional clarification.

- 1. In response 2b, your last bullet states that the tunnels were included in the investigation. Were the connector bridges also included? If so, were there any caulks or glazing present?
  - The bridges were included in the investigation. Caulks and glazes were identified on the bridges. They were homogeneous to caulks/glazes identified and sampled on the East Building and are included as applicable in the SIP and on the drawings as depicted on Figure 3C.
- 2. Concerning the concrete sills, on the first floor in contact with the Exterior Window Sill Cap Caulk- Are the concrete sills being cut at a distance of 3 " from the caulk or is the entire sill being removed? How are the sills being disposed of?
  - Concrete sills are specified to be cut at a distance of 3" from the caulk, based on initial substrate sampling data indicating 3" depth in concrete to have PCB impact less than 1ppm, and disposed of as PCB>50ppm waste. Post removal verification testing as described Section 3.5 to be performed to ensure remaining concrete less than 1ppm. As such remaining concrete shall be disposed of as C&D Bulky Waste at a permitted C&D

Solid Waste Landfill and/or recycled as CTDEP Clean Fill. Alternatively, at the discretion of the Construction Manager, the entire concrete sill may be removed and disposed of as >50ppm waste to reduce abatement labor effort to cut the sills, which would then require repair/replacement.

If you have any questions please feel free to contact me or Kim Tisa at 617-918-1527

Katherine Woodward, PE Environmental Protection Agency 5 Post Office Square, Suite 100

Mail Code: OSRR07-2 Boston, MA 02109-3912 Phone: 617-918-1353

# Plimpton, Erik (Windsor, CT-US)

From:

Plimpton, Erik (Windsor, CT-US)

Sent:

Wednesday, July 27, 2011 11:41 AM

To:

'Kimberly Tisa'

Cc:

'jamesfoote@arcadis-ogind.com'; Peshka, Jennifer (Windsor,CT-US)

Subject:

RE: International Baccalaureate School SIP Comments

Kim

Please find responses below in *Red italics* 

In addition please find a revised Table 4





revised table 4.xls

Revised Table 1.xlsx

Erik R. Plimpton, PE, CHMM

Managing Principal

Building Sciences Practice Leader21 Griffin Road North, Windsor, CT 06095

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----Original Message----

From: Kimberly Tisa [mailto:Tisa.Kimberly@epamail.epa.gov]

Sent: Thursday, July 21, 2011 10:04 AM

To: Plimpton, Erik (Windsor, CT-US)

Cc: Katherine Woodward

Subject: RE: International Baccalaureate School SIP Comments

Eric-

Here are EPA's comments on the IB PCB Abatement Plan dated May, 2011.

Should you have any questions, please feel free to call me at 617-918-1527 or Katherine Woodward at 617-918-1353.

- General Comment. It is unclear how the PCB wastes will be disposed of. There are various statements concerning this topic, including the following:
  - a. On page 8, the plan says that the window/door, frames and countertops will be removed and disposed of based on the PCB concentration detected in the caulks and glazing.
  - b. On page 12, the plan says that no segregation of PCB wastes will be performed during building material abatement work and that caulks and glazing will be removed together with the affected building substrates at each location

- c. On page 21, the plan says wastes generated during building remediation activities will be shipped for disposal as PCB Bulk Product Waste at a TSCA-permitted facility and no attempt will be made to segregate the removed material.
  - d. On page 21, the plan says that all wastes generated during soil remediation activities will be shipped as a PCB remediation waste at a PCB concentration of less than 50 ppm.

Thus, it would be helpful if a table were added to include the various waste streams, PCB concentrations, and proposed disposal facility.

No effort will be made to segregate federal/state regulated caulks/glazes and associated impacted building materials, and these removed materials shall be disposed of as >50ppm waste at a TSCA permitted facility, while the soil PCB remediation waste is characterized as <50ppm waste and will be disposed of as such at a state permitted facility

- PCB Bulk Product Waste Caulk/Glaze ≥50ppm TSCA permitted facility
- Non-Porous surfaces in contact with PCB Bulk Product Waste ≥50ppm TSCA permitted facility
- State Regulated Caulk/Glaze >1<50ppm TSCA permitted facility
- Non-Porous surfaces in contact with State Regulated Caulk/Glaze >1<50ppm TSCA permitted facility
- Porous surface PCB Remediation waste in contact with PCB Bulk Product Waste ->1ppm - TSCA permitted facility
- Porous surface PCB Remediation waste in contact with State Regulated Caulk/Glaze
   ->1ppm (if any) TSCA permitted facility
- Soil PCB Remediation waste >1<50ppm State permitted facility to accept PCB soil remediation waste >1<50ppm

#### 2. Page 3.

a. Section 1.2. It is not clear whether there are two HVAC mechanical rooms on each of the three floors of the building or whether there are simply two HVAC rooms for the entire east building. Were the rooms evaluated for possible PCB contamination? Please clarify.

There are two HVAC mechanical rooms on each of the  $1^{st}$ ,  $2^{nd}$  and  $3^{rd}$  floors of the East Building. Each room was included in the investigation and no suspect caulks/glazings were identified

- b. Section 1.3. This section states that the east and west buildings will be disconnected above ground and that the east building will be renovated.
  - i. It is unclear whether any of the structures are below grade. Please clarify.
  - ii. Please clarify how the connectors and tunnels
     will be addressed (i.e., will the structures be
     demolished?)
  - iii. If tunnels/bridges will be demolished, what will be the disposition of the wastes?
  - iv. It does not appear that any analysis for PCB bulk product was completed within the tunnels. Please

- The East building has a small Ground floor level which is below grade and there
  are also two below grade tunnels which connect the East and West Building as
  depicted on Figure 3A
- There are also two above grade bridge connectors on the 2<sup>nd</sup> floor level which connect the East and West Buildings as depicted on Figure 3C
- Each tunnel and bridge connector shall be demolished
- Asbestos, misc. hazmat items and any PCB Bulk Product Waste, State Regulated caulk and associated PCB Remediation Wastes shall be removed prior to demolition and the remainder of the building materials shall be disposed of as C&D Bulky Wastes at a permitted C&D Solid Waste Landfill and/or recycled as Clean Fill or Scrap Metal.
- The tunnels were included in the investigation and no suspect caulks/glazings were identified.
- 3. Page 5. Section 2.0. It is unclear if adequate sampling was conducted to confirm the PCB concentrations in the caulk and glazing which have been identified to contain less than (<) 50 ppm. Further, EPA is unable to determine how representative the sampling is. EPA generally recommends a minimum of 3 samples of each matrix type, unless there is limited matrix type present (e.g. caulk around a single window). Based upon a limited sample set of 1 sample per matrix, it is unclear if this is sufficient to be representative of Site conditions. Please clarify.

Sampling was conducted following techniques generally employed in the Building Sciences industry to identify, locate and representatively sample homogeneous building materials, such as the EPA AHERA asbestos inspection protocols, by individuals with EPA training and State of Connecticut licenses as asbestos containing building material inspectors. Buildings are divided into homogeneous areas and functional spaces based on dates of construction/renovation for individual wings/areas, and individual suspect homogeneous caulks/qlazes are identified in each separate functional space through visual appearance and the materials functional use (e.g. exterior door window glazing on type 2 door style vs. interior window glazing on type 1 window style vs. exterior window sill cap caulk, etc.). Samples of each individual homogeneous material were then collected by completely removing the caulk and glaze from the sampling location and inspecting the sample location and sample itself to determine if there were any other materials present and ensure the collected sample is a representative sample of a single homogeneous material. Based on the inspection techniques utilized, the general lack of renovations to the building itself and the therefore homogeneous nature of the respective building materials throughout, it is believed the distinct homogeneous materials were identified and single samples of each homogeneous suspect caulk/glaze are sufficient to be representative of each material and properly characterize the materials.

Further, with respect to the 11 materials characterized as Excluded Bulk Product <50ppm, 9 have identified PCB concentrations at less than half the level at which they would be re-characterized as PCB Bulk Product and 7 have identified PCB concentrations at less than one tenth the level at which they would be re-characterized as PCB Bulk Product.

4. Page 8. Section 2.2. How was Subpart N modified to meet the needs of the project?

Substrate sampling was not conducted at a grid interval of 1 sample per 10 LF, but rather samples were collected from representative worst case caulk PCB concentration/substrate combination areas to establish the likely depths of PCB impact into the substrate, if any, and the proposed PCB Remediation Waste substrate removal depths, if any, to be further verified with post-remediation verification sampling if applicable.

5. Page 18. Section 3.5. Deviations from the provisions of § 761.61(a) can be approved, with sufficient justification, under the provisions of § 761.61(c). Since the proposed verification sampling frequency is 1 sample every 50 linear feet instead of the frequency specified in Subpart O, justification for the proposed frequency is required.

The reduced verification sampling frequency was proposed based upon the results of the representative substrate sampling conducted as described above and in Sections 2.2, 2.2.1, 2.2.2 and Table 2. Representative samples were collected from the worst case caulk PCB concentration/porous substrate combination areas, from all sides of the building, at depths of 0", 3", 6" and 12". The representative worst case data clearly indicated no PCB impact >1ppm at the 3", 6" or 12" depths, with a further 92% of the samples collected at the 3" depth <0.5ppm and 46% of the samples at the 3" depth <0.1ppm. In addition, the building materials/construction is very homogeneous throughout and largely unrenovated, such that the representative data obtained is expected to be representative of the worst case findings throughout.

6. Page 21. PCB Bulk Product Waste, under the current regulatory interpretation, would include the caulks and glazing, and the non-porous surfaces that these products are in contact with. PCB contaminated porous surfaces in contact with PCB caulk and glazing would be considered to be PCB Remediation Waste. A better term for the combination of porous surfaces and PCB caulk or glazing would be PCB Waste ≥ 50 ppm.

#### Noted and accepted

#### 7. Table 1.

- a. Please provide the number of linear feet of each type of caulk or glazing present at the Site.
- b. Please provide the laboratory sample identification number for each of the samples listed.
- c. The dates in the "Date Analyzed" column for the Exterior Expansion Joint Caulk and Exterior Window Sill Cap Caulk do not match the laboratory reports. Please check the remaining entries in the table and correct for accuracy.

#### Revised Table 1 attached

#### 8. Figures 3A through 3E.

a. The title for each of the drawings is the same. Please identify, at a minimum, which floor the drawing represents.

#### 3A - Ground floor

3B - 1<sup>st</sup> floor 3C - 2<sup>nd</sup> floor 3D - 3<sup>rd</sup> floor 3E - Roof

b. Figures 3C and 3D appear to be the same drawing although 3D has additional "interior backsplash caulk' shown inside of the Special Education Classrooms located in the lower corners. Please confirm the accuracy of the figures.

Figures are accurate. 3C is the 2<sup>nd</sup> floor, 3D is the 3<sup>rd</sup> floor

9. Given that the two buildings (east and west buildings) were constructed during the same time period, there is potential that similar PCB products are also present in the west building. Is there any plan to renovate this building?

There are no plans to renovate the West Building

Kimberly N. Tisa U.S. Environmental Protection Agency 5 Post Office Square, Suite 100 Mail Code: OSRR07-2 Boston, MA 02109-3912

Phone: 617.918.1527 E-Fax: 617.918.0527

tisa.kimberly@epa.gov

			Table 1				
		Bulk Mat	Bulk Material Sample Analytical Results	ıalytical Result	10		
		Interna	International Baccalaureate School	reate School			
			Hartford, CT	T.			
Bulk Material ID	Laboratory Sample Identification Number	Date Sampled	Date Analyzed	Total PCBs (mg/kg)	Material Classification	Aroclor Identified	Approx. Total Linear Feet of Material
Exterior Door Window Glazing Type 2	CET AE62321	1/26/2011	2/11/2011	6.0	Excluded PCB Product	1254	154
Exterior Window Glazing	CET AE62319	1/26/2011	2/11/2011	35	Excluded PCB Product/State Regulated	1248 &1254	2912
Exterior Door Window Glazing Type 1	CET AE 62320	1/26/2011	2/11/2011	2.1	Excluded PCB Product/State Regulated	1254	209
Exterior Door Window Glazing Type 3	CET AE62322	1/26/2011	2/11/2011	13	Excluded PCB Product/State Regulated	1254	190
Exterior Window Caulk	CET AE63323	1/26/2011	2/11/2011	17	Excluded PCB Product/State Regulated	1254	2472
Interior Caulk Type 1(C1 - on Countertops)	CET AE62326	1/26/2011	2/11/2011	2.2	Excluded PCB Product/State Regulated	1254	370
Interior Window Glazing Type 2	CET AE62327	1/26/2011	2/11/2011	1.1	Excluded PCB Product/State Regulated	1254	878
Interior Window Glazing Type 1	CET AE62328	1/26/2011	2/11/2011	59	Excluded PCB Product/State Regulated	1254	2912
Light gray caulk	SA SB25771-01	3/15/2011	3/24/2011	4.03	Excluded PCB Product/State Regulated	1254	12
Dark gray caulk	SA SB25771-02	3/15/2011	3/24/2011	1,1	Excluded PCB Product/State Regulated	1254	12
Red caulk	SA SB25771-03	3/15/2011	3/24/2011	1.03	Excluded PCB Product/State Regulated	1254	12
Exterior Expansion Joint Caulk	CET AE62324	1/26/2011	2/14/2011	100,000	PCB Bulk Product Waste	1254	1840
Exterior Window Sill Cap Caulk	CET AE62325	1/26/2011	2/14/2011	56,000	PCB Bulk Product Waste	1254	1012
Exterior Door Caulk	SA SB24765-01	2/17/2011	2/23/2011	46,000	PCB Bulk Product Waste	1254	196

r

		Table 4	
	Quantification of Materials to	rials to be Abated and Verification Sample Estimate	Estimate
	Internation	International Baccalaureate School	
	Ha	Hartford, Connecticut	
PCB Bulk Product Waste	Locations	Comments	Verification Samples
Exterior Expansion Joint Caulk	Located between joints in the exterior brick façade, along the vertical sides of the windows and along the horizontal length of the mechanical room intake vents	Bulk material samples collected at 0", 3", 6" and 12" beyond contact point. Sample results indicated no penetration of PCBs into surrounding porous brick past 3". Removal will create 1840 LF of newly exposed surfaces.	1 sample per 50 LF of newly exposed surfaces. 37 verification samples to be collected.
Exterior Window Sill Cap Caulk	Located below the metal window sill cap where it meets the brick façade on the second and third floors and where it meets concrete on the first floor	Bulk material samples collected at 0", 3", 6" and 12" beyond contact point. Sample results indicated no penetration of PCBs into surrounding porous brick past 3". Removal will create 1012 LF of newly exposed surfaces. Metal window sill cap will be disposed of as PCB waste.	1 sample per 50 LF of newly exposed surfaces. 20 verification samples to be collected.
Exterior Door Caulk	Located along the metal door frames where it meets the brick façade.	Bulk material samples collected at 0", 3", 6" and 12" beyond contact point. Sample results indicated no penetration of PCBs into surrounding porous brick past 3". Removal will create 196 LF of newly exposed surfaces. Door frame will be disposed of as PCB waste.	1 sample per 50 LF of newly exposed surfaces. 4 verification samples to be collected.
State Regulated PCB-Material	Locations	Comments	Verification Samples
Exterior Window Glazing	Located throughout all exterior windows.	Glazing in contact with non-porous glass window and non-porous metal window sash. Whole window will be disposed of as PCB waste.	None
Exterior Door Window Glazing Type 1	Located throughout the exterior door windows.	Glazing in contact with non-porous glass window and non-porous metal door. Whole doors will be disposed of has PCB waste.	None

		Table 4	
	Quantification of Materials to	Quantification of Materials to be Abated and Verification Sample Estimate	Estimate
	Internatio	ternational Baccalaureate School	
	На	Hartford, Connecticut	
Exterior Door Window Glazing Type 3	Located on two out of twenty-eight exterior door windows	Glazing in contact with non-porous glass window and non-porous metal door. Whole door will be disposed of as PCB waste.	None
Exterior Window Caulk	Located throughout all exterior windows.	Caulk in contact non-porous metal window frames. Whole windows will be disposed of has PCB waste.	None
Interior Caulk Type 1(C1 - on Countertops)	Located on Formica countertops where the counter and backsplash meet in Rooms 103, 105, 110, 113, 115, 116, 118, 211 A, 211B, 308, 311A, 311B, 325.	Caulk in contact with non-porous Formica counter & backsplash surface at point of contact. Whole counter will be disposed of as PCB waste.	None
Interior Window Glazing Type 2	Located throughout the interior windows in Rooms 102, 106, 112, 113, 209, 210, 223, 224, 309, 310, 323, 324, 2nd & 3rd Floor Administrative Suites.	Glazing in contact with glass window and metal window sash. Whole window will be disposed of as PCB waste.	None
Interior Window Glazing Type 1	Located on the interior side of all the exterior windows.	Glazing in contact with glass window and metal window sash. Whole window will be disposed of as PCB waste.	None
Light gray caulk	Located on the roof skylight.	Caulk in contact with glass skylight and metal skylight frame. Whole skylight will be disposed of as PCB waste.	None
Dark gray caulk	Located on the roof skylight.	Caulk in contact with glass skylight and metal skylight frame. Whole skylight will be disposed of as PCB waste.	andN
Red caulk	Located on the roof skylight.	Caulk in contact with glass skylight and metal skylight frame. Whole skylight will be disposed of as PCB waste.	

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